

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG ELECTRIC LOGS X WATER SANDS LOCATION INSPECTED SUB. REPORT/abd.

DATE FILED **11-12-86**

LAND: FEE & PATENTED STATE LEASE NO. PUBLIC LEASE NO. **U-27918** INDIAN

DRILLING APPROVED: **1-13-87** (Exception Location)

SPUDDED IN: **8-13-87**

COMPLETED: **4-25-88 TA** PUT TO PRODUCING:

INITIAL PRODUCTION:

GRAVITY A.P.I.

GOR:

PRODUCING ZONES:

TOTAL DEPTH:

WELL ELEVATION:

DATE ABANDONED:

FIELD: **UNDESIGNATED**

UNIT:

COUNTY: **SUMMIT**

WELL NO. **FLASH FEDERAL #1** API #**43-043-30282**

LOCATION **900' FSL** FT. FROM (N) (S) LINE, **2600' FWL** FT. FROM (E) (W) LINE. **SE SW** 1/4 - 1/4 SEC. **18**

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
3N	15E	18	SUN EXPLORATION & PROD.				

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONFIDENTIAL

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL ☒ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL
OIL WELL ☐ GAS WELL ☒ OTHER ☐ SINGLE ZONE ☐ MULTIPLE ZONE ☐

2. NAME OF OPERATOR

SUN EXPLORATION AND PRODUCTION COMPANY

3. ADDRESS OF OPERATOR

P.O. BOX 5940, T.A., DENVER, COLORADO 80217

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
At surface

900' FSL & 2600' FWL SE/4 SW/4 SECTION 18

At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

APPROXIMATELY EIGHT (8) MILES W/SW OF LONETREE, WYOMING

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

1310

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

5200'

16. NO. OF ACRES IN LEASE

1793.70

17. NO. OF ACRES ASSIGNED
TO THIS WELL

640

19. PROPOSED DEPTH

16,000'

20. ROTARY OR CABLE TOOLS

ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

8733' GR

22. APPROX. DATE WORK WILL S

DECEMBER 1, 1986

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2	13 3/8	54.5#	0 - 500'	625 SX, CIRC TO SURE
12 1/4	9 5/8	43.5 & 47#	0 - 10,700'	800 SX, CLASS "G"
8 1/2	5 1/2	23#	10,500 - 16,000'	700 SX, CLASS "G" ON BTM
				400 SX, CLASS "G" ON TOP

SEE ATTACHED APD

SUN EXPLORATION AND PRODUCTION COMPANY HAS A CURRENT NATIONWIDE BOND.

APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

DATE: 11-19-86
BY: [Signature]
WELL SPACING: 302.1

RECEIVED
NOV 12 1986

DIVISION OF
OIL, GAS & MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new pro zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give a preventer program, if any.

24.

SIGNED

Steve Stearns

TITLE

DIST. DRLG. ENG.

DATE

11-6-86

(This space for Federal or State office use)

PERMIT NO.

43-043-30282

APPROVAL DATE

APPROVED BY

TITLE

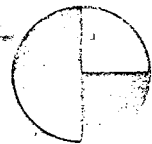
DATE

CONDITIONS OF APPROVAL, IF ANY:

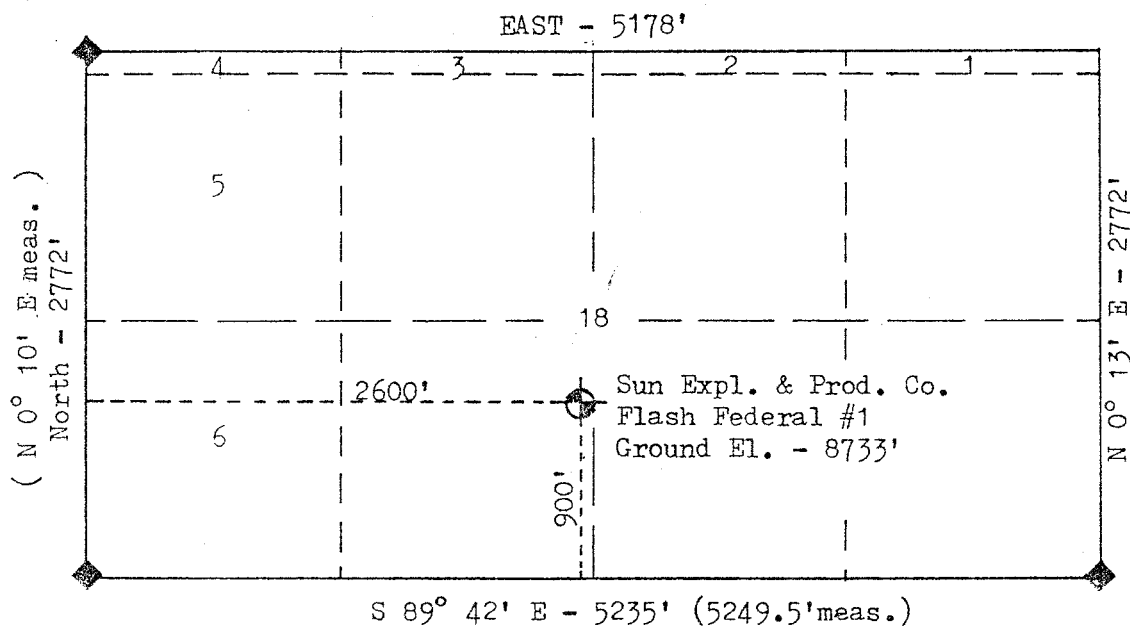
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*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



N

T.
3
N.

NOTES:

1. Basis of Bearing is S 89° 42' E on the south line of Section 18.
2. Bearings and distances are GLO plat dimensions unless otherwise noted.
3. ♦ Indicates IPBC found.

Scale: 1"=1000'

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Powers Elevation of Denver, Colorado has in accordance with a request from Dale Fessler for Sun Exploration & Production Company determined the location of Flash Federal #1 to be 900' FSL & 2600' FWL Section 18 , Township 3 North Range 15 East of the Salt Lake Base and Meridian, Summit County, Utah.

I hereby certify that this plat is an accurate representation of a correct survey showing the location of Flash Federal #1.

Date: October 27, 1986

T. Nelson
 Licensed Land Surveyor No. 2711
 State of Utah

EXHIBIT # 1

SUN EXPLORATION AND PRODUCTION COMPANY

Lease # U-27918, Flash Federal #1
NESW Section 18, T3N - R15E
Summit County, Utah

Drilling Prognosis

1. Estimated Tops of Geologic Markers

Bridger	Surface
Green River/Wasatch	1,408'
Fort Union	7,376'
Coal Seams	8,000-10,000'
Mesaverde	10,596'
Hilliard	12,339'
Frontier	14,721'
Mowry	14,856'
Dakota	15,076'
TD	16,000'

2. Estimated Depths of Anticipated Water, Oil, Gas or Mineral Formations

Green River/Wasatch	1,408'	Water Possible
Fort Union	7,376'	Water Possible
Mesaverde	10,596'	Oil/Gas Possible
Frontier	14,721'	Oil/Gas Possible
Dakota	15,076'	Oil/Gas Possible

If any shallow water zones are encountered, they will be adequately protected and reported; none anticipated. Potentially productive hydrocarbon zones will be cemented off.

3. Pressure Control Equipment

A. Interval(s) at which used: 0-500'

None

B. Interval(s) at which used: 500-16,000'

Type: 13-5/8" Double Gate Hydraulic, 13-5/8"
Annular Preventer equipped with hydraulic
choke and manifold.

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3. Pressure Control Equipment (Continued)

Pressure Rating: 10,000 psi working pressure BOP's
5,000 psi working pressure annular
10,000 psi manifold

Testing Procedure: The BOP and choke manifold will be tested to 70% of the internal yield of the casing or rated working pressure whichever is less. The annular preventer will be tested to 1/2 of rated working pressure. The test will be for a period of 15 minutes upon installation, once every thirty days and/or when flange seals are broken if a "nipple up" or "nipple down" takes place.

The fill line will be 3", kill line will be 3" and choke line will be 4". BOP drills and tests will be recorded in the drillers log.

The choke manifold and BOP extension rods and handwheels will be located outside the substructure. The hydraulic BOP closing unit will be located at least 25 feet from the wellhead in the accumulator house, with a remote control unit on the rig floor available to the driller. Exact locations and configurations will depend upon the particular rig layout.

4. The Proposed Casing and Cementing Program

A. Casing Program

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt/Ft</u>	<u>Grade</u>	<u>Joint</u>	<u>Depth Set</u>	<u>String Length</u>
17½	13-3/8	54.5#	K-55	BTC	0-500'	500'
12¼	9-5/8	43.5#	N-80	LTC	0-7000'	7000'
12¼	9-5/8	47#	N-80	LTC	7000-9500'	2500'
12¼	9-5/8	47#	S-95	LTC	9500-10,7000'	1200'
8½	5-1/2	23#	N-80	LTC	10,500-16,000'	5500'
	2-7/8*	6.5#	N-80	EUE	0-16,000'	16,000'

* Production tubing if well is productive.

Casing strings will be tested to .2 psi/ft or 1000' whichever is greater prior to drilling out. Conductor pipe will not be tested.

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4. The Proposed Casing and Cementing Program (Continued)

B. Cementing

Surface Casing: 350 sacks Dowell Lite w/3% CaCl_2 and $\frac{1}{4}\#/\text{sx}$ D-29, followed by 150 sacks Class "G" w/3% CaCl_2 and $\frac{1}{4}\#/\text{sx}$ D-29.
TOC - Surface

Intermediate Casing: 800 sacks Class "G" w/.5% D-60.
Estimated TOC - 8700' w/46% excess.

Production Liner: 300 sacks Class "G" w/1% D-60, 30% D-66, 3% KCL and retarder as needed followed by 300 sacks Class "G" w/30% D-66, 2.5 gal/sx D-600, 3% KCL and retarder as needed. Estimated TOC - 13,000' w/20% excess. The line lap will be squeeze cemented w/400 sx of Class G w/.25% Retarder.

Cement volumes will be adjusted to ensure that all potentially productive hydrocarbon zones are cemented off. The actual top of cement will be determined from logs.

5. Mud Program

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-500	Fresh water with gel & lime sweeps	8.6-8.8	30-40	NC
500-7500	LSND w/ASP-700 and Gel & lime sweeps	8.6-9.0	30-40	NC
7500-10,700	LSND w/gel, lime, caustic, ASP-700, shale stabilizer as needed	8.8-9.4	45-90	15-30
10,700-14,500	LSND w/weight as needed, ASP-700, and shale stab.	9.5-12.0	45-60	10-15
14,500-16,000	LSND w/weight as needed, ASP-700, shale stab, and 3% KCL	9.5-12.0	45-65	5-10

Sufficient mud material to maintain mud properties, control lost circulation and prevent a blowout will be available at the wellsite.

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6. Evaluation Process

Logs:	Dipmeter	Total Depth to 14,800'
	BHC-Sonic	Total Depth to 10,700'
	DIL-SFL	Total Depth to 10,700'
	LDT-CNL	Total Depth to 10,700'

DST's: None

Cores: 2 - 60 foot cores in Dakota

Evaluation process may change at the discretion of the wellsite geologist with the approval of the BLM.

Stimulation: No stimulation or frac treatment has been formulated for this test. The BLM will be notified by "Sundry Notice" prior to any completion activity with a complete frac program. The drillsite as approved, will be of sufficient size to accommodate all completion activity.

7. Abnormal Conditions

No abnormal temperatures or pressures are anticipated. No H₂S has been reported or known to exist from previous drilling in the area to this depth. Maximum anticipated bottom hole pressure is 6800 psi.

8. Drilling Activity and Auxiliary Equipment

A. Drilling Activity

Anticipated Commencement Date:	December 5, 1986
Drilling Days:	Approximately 95 days
Completion Days:	Approximately 30 days

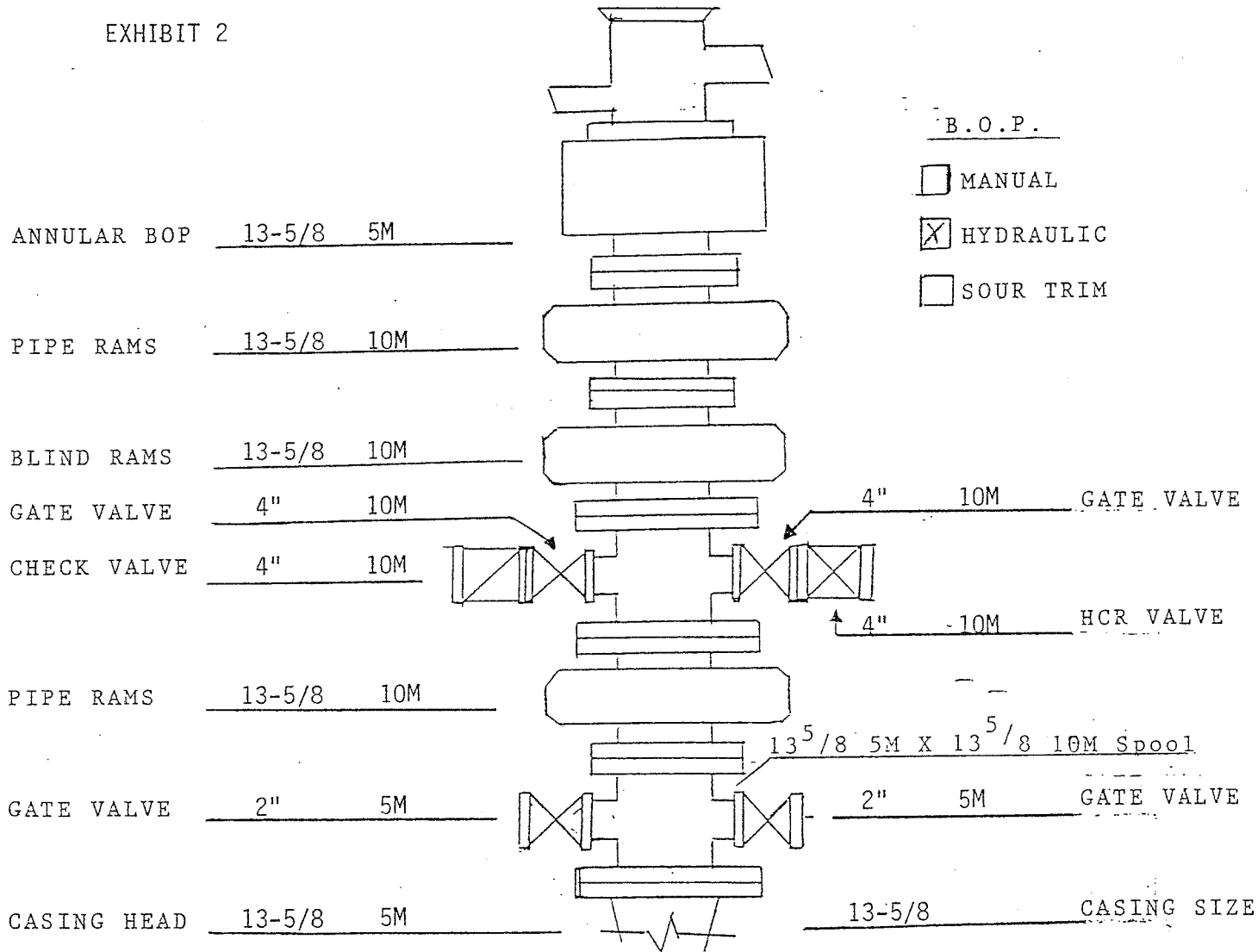
B. Auxiliary Equipment

- 1) A Kelley Cock will be kept in string at all times.
- 2) Periodic checks will be made each tour of the mud system.
- 3) A Stabbing Valve will be kept on the derrick floor to be stabbed into the drill string whenever the Kelley is not in the string.
- 4) No float will be used in the drill string.
- 5) A Pit Volume Totalizer and Flow-Sho Indicator will be installed on rig-up.

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COMPANY Sun Exploration & Production WELL NAME FLASH FEDERAL #1
 LOCATION NESW SECTION 18 T3N R15E SUMMIT CO., UTAH
 INTERVAL TO BE USED 500-10,100'

EXHIBIT 2



TEST PROCEDURE

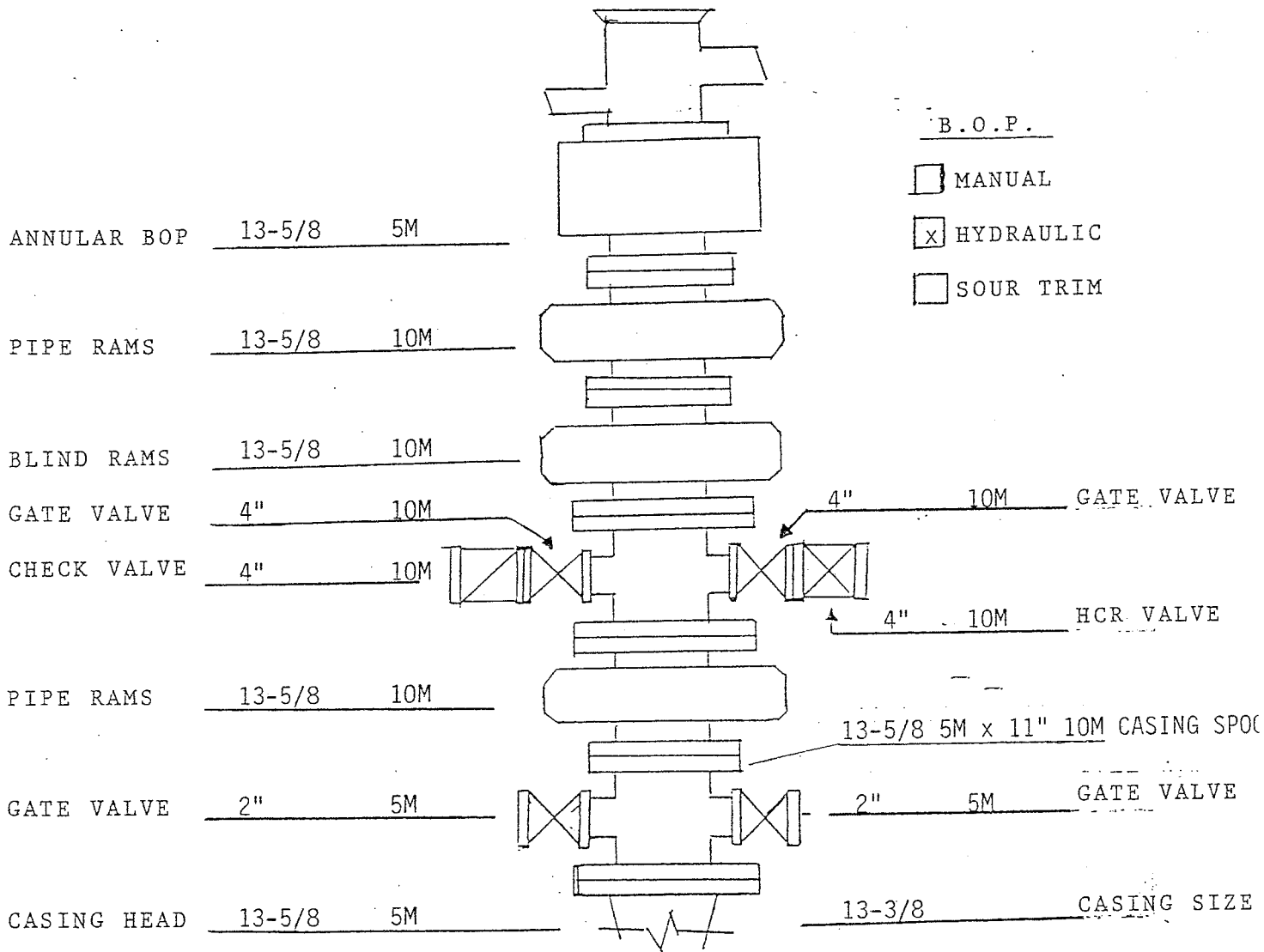
- 1) Ram type preventers will be tested to rated working pressure of stack or 70% of internal yeild of casing whichever is less.
- 2) Annular type preventers will be tested to 50% of rated working pressure.
- 3) BOP will be tested at time of installation and at least every 30 days. Pipe rams will be operated once each 24 hours and blind rams will be tested on trips.

BOP PROCEDURES AND DRILLS

- 1) Approved close in procedure to be posted on the rig floor.
- 2) Each rig crew to hold a close in drill weekly.
- 3) Drills will be noted on IADC daily drilling report at the rig.

EXHIBIT #2 **CONFIDENTIAL**

COMPANY Sun Exploration & Production WELL NAME FLASH FEDERAL #1
 LOCATION NESW SECTION 18 T3N R15E SUMMIT CO., UTAH
 INTERVAL TO BE USED 10,100-15,200'



TEST PROCEDURE

- 1) Ram type preventers will be tested to rated working pressure of stack or 70% of internal yeild of casing whichever is less.
- 2) Annular type preventers will be tested to 50% of rated working pressure.
- 3) BOP will be tested at time of installation and at least every 30 days. Pipe rams will be operated once each 24 hours and blind rams will be tested on trips.

BOP PROCEDURES AND DRILLS

- 1) Approved close in procedure to be posted on the rig floor.
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AUXILLIARY BOP EQUIPMENT

- 1) Upper and lower kelly valve (in use)
- 2) Safety valve (rig floor)
- 3) Inside BOP valve (rig floor)
- 4) Extra drill pipe to drill collar sub (rig floor)

CHOKE MANIFOLD

All valves and fittings will be rated at 10,000 working pressure.

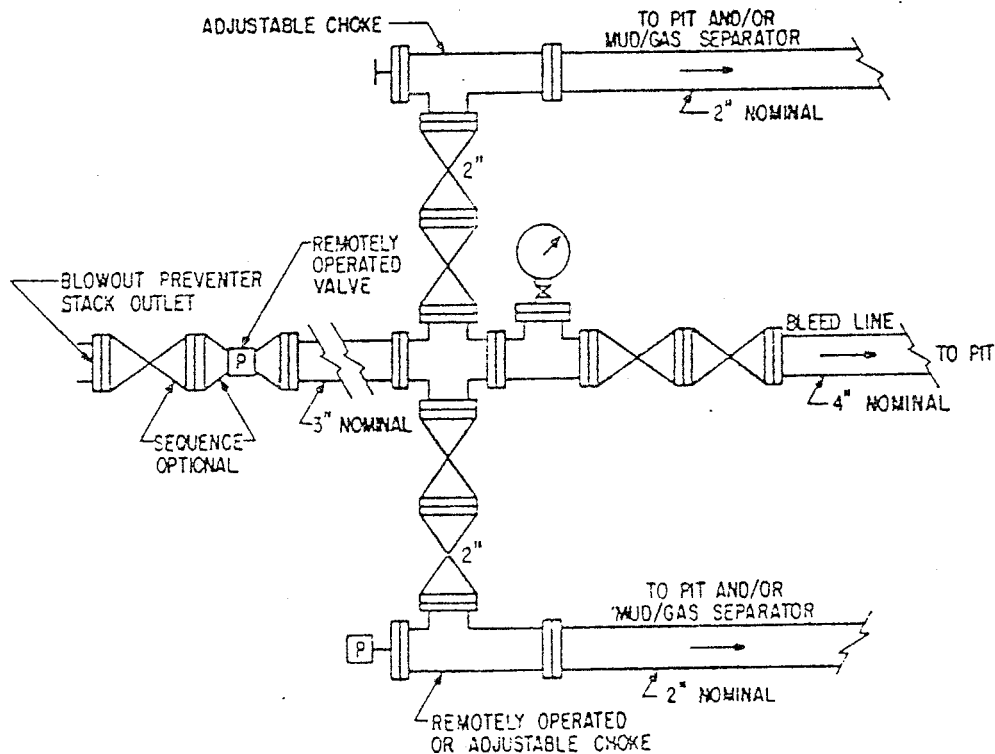


FIG. 3.A.2

TYPICAL CHOKE MANIFOLD ASSEMBLY FOR 10M
RATED WORKING PRESSURE SERVICE —
SURFACE INSTALLATION

EXHIBIT # 3BOP ACTUATING SYSTEM

- 1) Accumulator capacity will supply $1\frac{1}{2}$ times volume necessary to close all BOP equipment units with a minimum pressure of 203 psi above pre-charge pressure.
- 2) Accumulator back up system supplied by a secondary power source independent of primary power source, will be provided with sufficient capacity to close all blowout preventers.
- 3) Locking devices will be provided on ram type preventers.
- 4) Primary BOP actuating control will be hydraulic and located either in the dog house or on the rig floor. Back up control will be provided by hand-wheel manual operation of BOP.

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MULTIPOINT SURFACE USE AND OPERATIONAL PLAN

Sun Exploration & Production Company
Flash Federal #1
NESW Sec. 18 T3N, R15E
Summit County, Utah

1. Existing Roads

- A. The proposed well site and elevation plat is shown as Exhibit #1.
- B. From Lone Tree, Wyoming, go 1 mile west on gravel road turn south and go $1\frac{1}{2}$ miles. Turn west and go $\frac{1}{2}$ mile to "Y" take the road to the right for $7\frac{1}{4}$ miles to "Y". Turn to the right $\frac{1}{3}$ mile into location.
- C. Approximately $\frac{1}{3}$ mile of existing two-track will be upgraded to a flat-bladed road with an 18' surface.
- D. All roads within a one mile radius are shown on Exhibit #5.
- E. The existing roads will need no improvement only maintenance. From there the road will be flat bladed to a width of 18 feet. All existing roads will be maintained in the same condition.

2. Planned Access Roads

- A. A map showing all necessary roads is attached as Exhibit #5.
 - 1. The access road will be flat bladed to a width of 18 feet on the running surface.
 - 2. The maximum grade will be 7 percent.
 - 3. There will be no turnouts.
 - 4. The road will not have drainage ditches.
 - 5. If culverts are needed, their size and location will be determined at the onsite.
 - 6. No major cuts and fills are expected.
 - 7. The new access road to be built was centerline flagged during staking.
- B. The Production Road
 - 1. If production is obtained the access road will be upgraded and maintained as necessary to prevent soil erosion and to accomodate year round traffic.
 - 2. The access road will be flat bladed to a width of 18 feet.

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C. Location of Existing Wells

1. There are no water wells within a one mile radius.
2. There are no disposal wells within a one mile radius.
3. There are no injection wells within a one mile radius.
4. There are no abandoned wells within a one mile radius.
5. There are no temporarily abandoned wells within a one mile radius.
6. There are no monitoring wells within a one mile radius.
7. There are no shut-in wells within a one mile radius.
8. There is 1 producing well within a 1 mile radius which is located in the NWNE of Section 13 T3N R15E Summit County, Utah.

3. Location of Existing and/or Proposed Facilities

A. If the well is productive a tank battery will be constructed on the location.

1. The sundry notice will be submitted for the production facilities.
2. All flowlines will be buried. Any necessary pits will be fenced and flagged to protect wildlife. The pad will be constructed with the native soil from the site and possibly some gravel.

B. If the Well is a Producer

1. Those areas not required for production, will be landscaped to the surrounding topography.
2. We will plant vegetation prescribed by the BLM, to maintain quality and purity, certified seed with a minimum germination rate of 80% and a minimum purity of 90% will be used. The seed mixture is - Western Wheatgrass 6#/acre
Strearbark 6#/acre
TOTAL 12#/acre
3. The backslope will be reduced to 2½:1 and the foreslope to 2½:1. Reduce slopes by pulling fill material up from foreslope into the toe of cut slopes.
4. Production facilities (including dikes) will be placed on the cut portion of the location and a minimum of 5 feet from the toe of the back cut.
5. A dike will be constructed completely around the production facilities (I.E. production tanks, water tanks, and/or heater-treater). The dikes for the production facilities must be constructed of compacted subsoil hold the capacity of the largest tank, and be independent of the back cut. Any production pits will be fenced with at least four (4) strands of barbed wire and held in place by side posts and corner H-braces.
6. The stockpiled topsoil will be distributed evenly over those areas not required for production and reseed as recommended by surface owner.

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4. Location and Type of Water Supply

- A. Water will be furnished by Sun.
- B. Water will be transported by truck over existing lease roads.
- C. No water well will be drilled on this lease.

5. Construction Materials

- A. Only the native soils will be used for construction of the wellsite and access.
- B. Gravel materials will be used on the access and wellsite.
- C. The above materials are not federally owned.
- D. No additional roads will be constructed for the purpose of hauling materials.
- E. The reserve pit will be lined w/2-3" of bentonite.

6. Methods for Handling Waste Material

- A&B. All drill cuttings and drilling fluids will be disposed of in the reserve pit. The pit will be back filled after it has dried. All gas used in drilling will be burned.
- C. The burn pit will be covered and enclosed on four sides and 3/4 of the top with small mesh wire, to prevent trash from being carried or blown off site. After the burn pit is no longer in use, it will be covered with a minimum of four (4) feet of earth. No trash is to be placed in reserve pit.
- D. All salts will be deposited in the reserve pit.
- E. All chemicals will be deposited in the reserve pit.
- F. Sewage shall be placed in a self-contained, chemically treated porta-potty or bore hole on location. Any sewage left on location will be buried at least six (6) feet deep upon well completion.
- G. After the rig moves out, all materials will be cleaned up and no adverse materials will be left on location.
- H. Any produced oil or condensate recovered during testing will be placed in tanks on the location.
- I. Produced water will be put in the reserve pit during completion work per NTL-2B.

7. Auxillary Facilities

- A. No camps or airstrips will be constructed at this location.

8. Wellsite Layout

- A. Please refer to Exhibit #7 for cross section.
- B. Please refer to Exhibit #8 for location layout.
- C. Please refer to Exhibit #9 for production facilities.
- D. Please refer to Exhibit #10 for the access road routing.
- E. DURING CONSTRUCTION

1. The top 6 inches of soil will be removed from the location including areas of cut, fill, and/or subsoil storage areas and stockpiled at the site.
2. The operator will not push soil material and overburden over side slopes or into drainages. All soil material disturbed will be placed in an area where it can be retrieved.
3. If there is snow on the ground when construction begins, the operator will remove it before the soil is disturbed, and pile it downhill from the topsoil stockpile location.
4. The backslopes will be constructed no steeper than $1\frac{1}{2}:1$, and the foreslope no steeper than $1\frac{1}{2}:1$.
5. A 20' vegetative border will be maintained between toe-of-fill of pad and/or pit areas and the edge of adjacent drainages.
6. The reserve pit will be constructed with a minimum of one-half ($1/2$) the total depth below the original ground surface on the lowest point within the pit.
7. The reserve pit will be designed to prevent the collection of surface runoff.
8. If any cultural values are observed during construction and operations, leave them intact and notify the Area Manager, Bureau of Land Management, Rock Springs, Wyoming 82901. See Exhibit #4 for Cultural Resource Report.
9. If paleontological resources, either large and conspicuous, and/or of significant scientific value are discovered during construction, the find will be reported to the Authorized Officer immediately. Construction will be suspended within 250 feet of said find. An evaluation of the paleontological discovery will be made by a BLM approved professional paleontologist within five (5) working days, weather permitting, to determine the appropriate action(s) to prevent the potential loss of any significant paleontological values. Operations within 250 feet of such a discovery will not be resumed until written authorization to proceed is issued by the

Authorized Officer. The applicant will bear the cost of any required paleontological appraisals, surface collection of fossils, or salvage of any large conspicuous fossils of significant scientific interest discovered during the operations.

E. During Operations

1. All equipment and vehicles will be confined to the access road, pad, and area specified in the APD.
2. The reserve pit will be fenced on three (3) sides during drilling and the fourth side at the time the rig is removed.

9. Surface Owner

Wasatch National Forest, USA
Mountain View, Wyoming

A. IF THE WELL IS DRY HOLE

1. A Notice of Intent to Abandon and a Subsequent Report of Abandonment must be submitted for abandonment approval.

10. Plans for Restoration of Surface

- A. If well is abandoned, site will be restored to original condition as nearly as possible. Backfilling, leveling and contouring are planned as soon as all pits have dried. Waste and trash will be buried or burned, and unused drilling materials will be removed from site, immediately after drilling is completed. If production is obtained, the unused area will be restored as soon as possible.
- B. The soil banked material will be spread over the area. Revegetation will be accomplished by planting mixed grasses as per formula provided by the BLM.
- C. Three sides of the reserve pit will be fenced during drilling operations. Prior to rig release, the reserve pit will be fenced on the fourth side to prevent livestock or wildlife from entering; and the fencing will be maintained until leveling and clean up are accomplished.
- D. If any oil is on the pits and is not immediately removed or burned after operations cease, the pit containing the oil or other adverse substances will be flagged overhead or covered with wire mesh.

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E. The rehabilitation operations will begin immediately after the drilling rig is removed. Removal of oil or other adverse substances will begin immediately or area will be flagged and fenced. Other cleanup will be done as needed. It is estimated that reclamation operations will be completed by late summer, 1987 depending upon weather conditions.

11. Other information

A. The primary surface use is for grazing livestock. All work will be done in accordance with BLM stipulations.

12. Lessee's or operator's representative

Vernon J. Hale
P.O. Box 5940 T.A.
Denver, Colorado 80217
(303) 696-3500

13. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by SUN EXPLORATION AND PRODUCTION COMPANY and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date

November 6, 1986

Vernon J. Hale
District Drilling Manager

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Cultural Resource Management Report

Sun Exploration and Production Company

Flash Prospect

Summit County, Utah

Lead Field Investigator

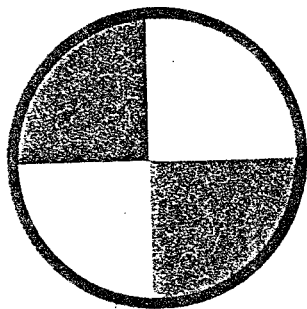
Brian P. O'Neil, M.A.

Principal Investigator

Marcia J. Tate, M.A.

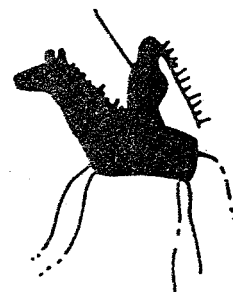
Date Oct. 27, 1986 For

Sun Exploration
and Production Company



POWERS ELEVATION

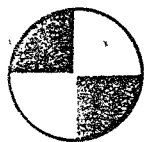
P.O. Box 2612
Denver, Colorado 80201-2612
(303) 321-2217



Archaeology Department
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A DIVISION OF PETROLEUM INFORMATION CORPORATION AN A.C. NIELSEN COMPANY

EXHIBIT # 4



Powers Elevation, Inc.

OIL WELL ELEVATIONS-LOCATIONS
ENVIRONMENTAL-ARCHAEOLOGICAL SERVICES
P.O. Box 2612
Denver, Colorado 80201-2612
Phone 303/321-2217
Toll Free 1-800-824-2550

PROJECT IDENTIFICATION: A cultural resources survey report for the following Flash Prospect well pad and access, Summit County, Utah; Wasatch National Forest, Mountain View Ranger District.

ANTIQUITIES PERMIT NO.: Wasatch National Forest (exp. 12/31/86)
State: U-86-Ta-695f.

FILES SEARCH: A files search was requested from the Utah Historical Society on October 23, 1986.

LOCATION: The well location is situated at 900 feet FSL and 2600 feet FWL, Section 18, T.3N., R.15E. Access road takes off from an existing Forest Service road.

MAP REFERENCE: Gilbert Peak N.E., 1967.

DATE OF INVESTIGATION: October 25, 1986.

PERSONNEL: Brian P. O'Neil, Field Investigator; Marcia J. Tate, Principal Investigator.

PROPOSED ACTION: The proposed action is the construction of a well pad with an estimated disturbance area of approximately 1-2 acres along with an access road of approximately 2000 feet in length from the center stake to the existing Forest Service road.

ENVIRONMENT: The topography consists of a broad ridge with numerous small hills and depressions formed by quarternary glacial deposits. The ridge lies between two permanent drainages, Henrys Fork to the northwest and Lost Creek to the southeast. Soils are a dark brown to tan sandy loam mixed with gravels and cobbles. Vegetation consists primarily of sagebrush, grasses, and forbs, with stands of aspen, fir, and common juniper. Vegetation cover varies from 60 to 90%. Slopes are generally 2 to 10% on the top of the broad ridge, with 40% grades occurring along the slopes to the Henrys Fork. Elevation is approximately 8,740 feet. Exposure is open.

FIELD METHODS: A 40 acre area surrounding the well pad center stake was surveyed by walking a series of parallel east-west transects at intervals of 15 meters.

CONFIDENTIAL

Sun Exploration
and Production Company
Flash Prospect
Page 2

FIELD METHODS, CONTINUED: The access road was surveyed by walking a pair of sinuous transects extending 50 feet each side of the center to form a 100 foot right-of-way approximately 900 feet long outside of the 40 acres. Rodent burrows, and hills, and road cuts were examined for evidence of buried cultural materials. Approximately 42.1 acres were surveyed.

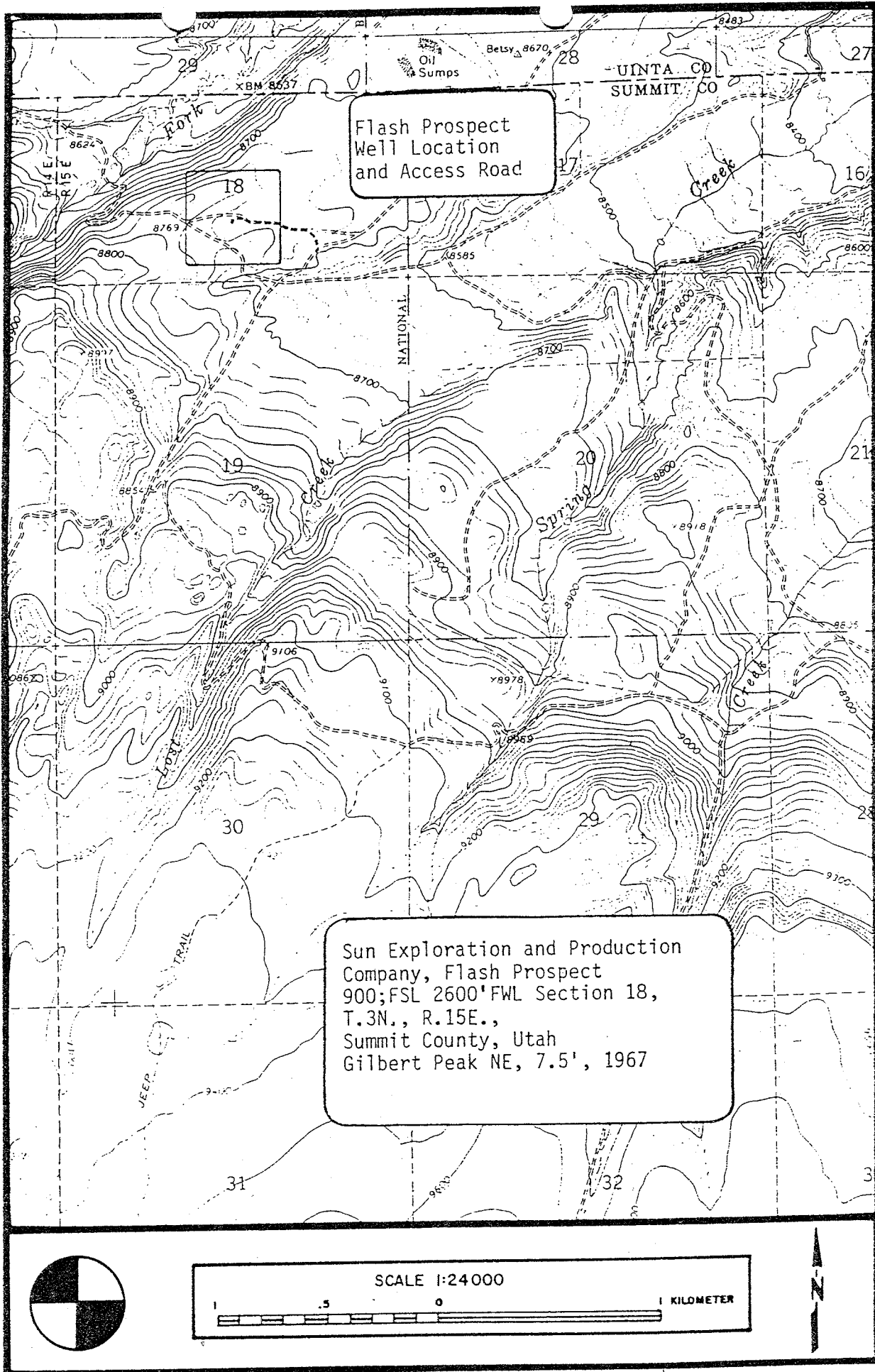
RESULTS: No prehistoric or historic cultural resources were observed within the project area.

RECOMMENDATIONS: Given the absence of cultural resources, we recommend that the project be allowed to proceed.

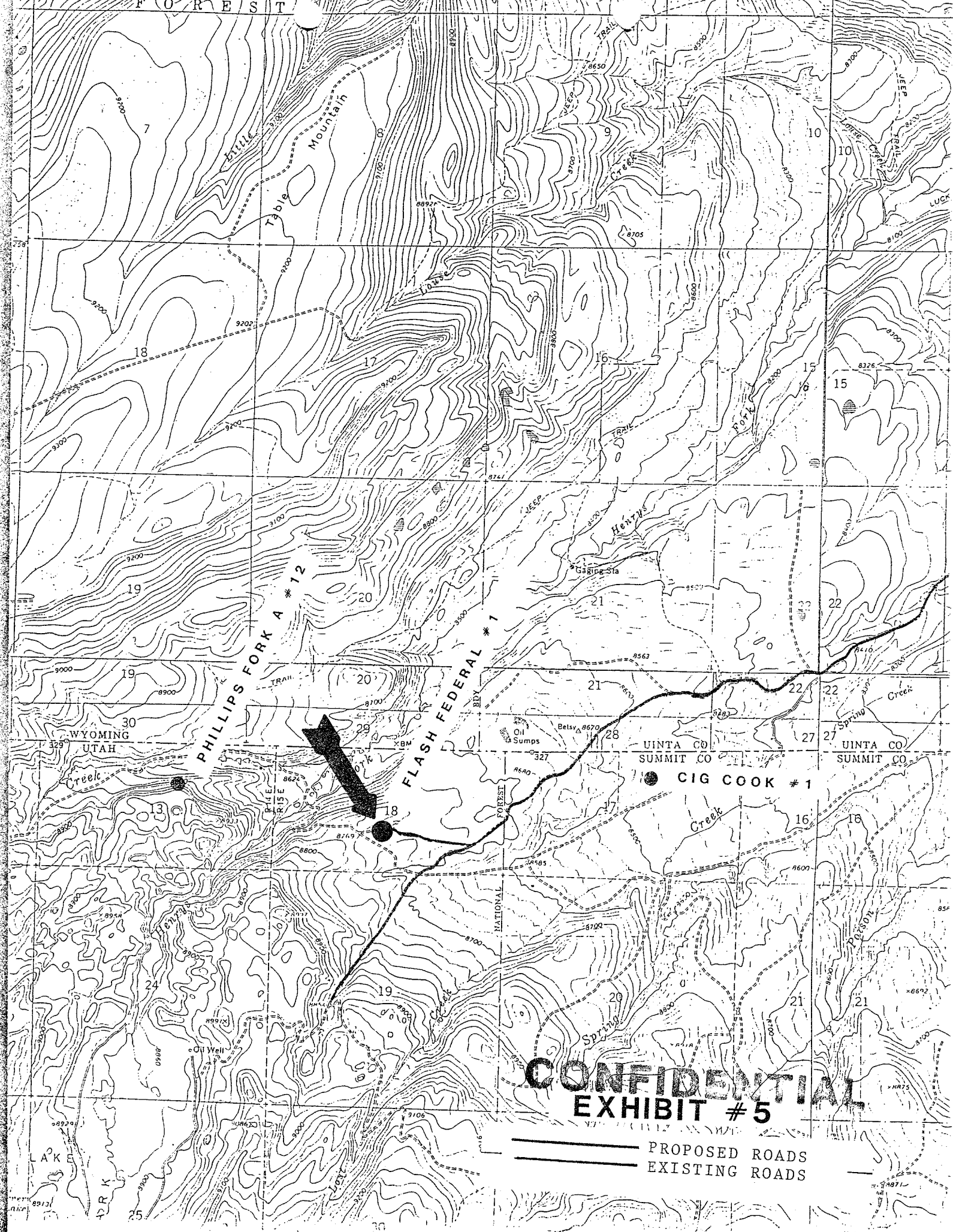
Marcia J. Tate 10/27/86
Marcia J. Tate Date
Principal Investigator

MJT/mk

CONFIDENTIAL

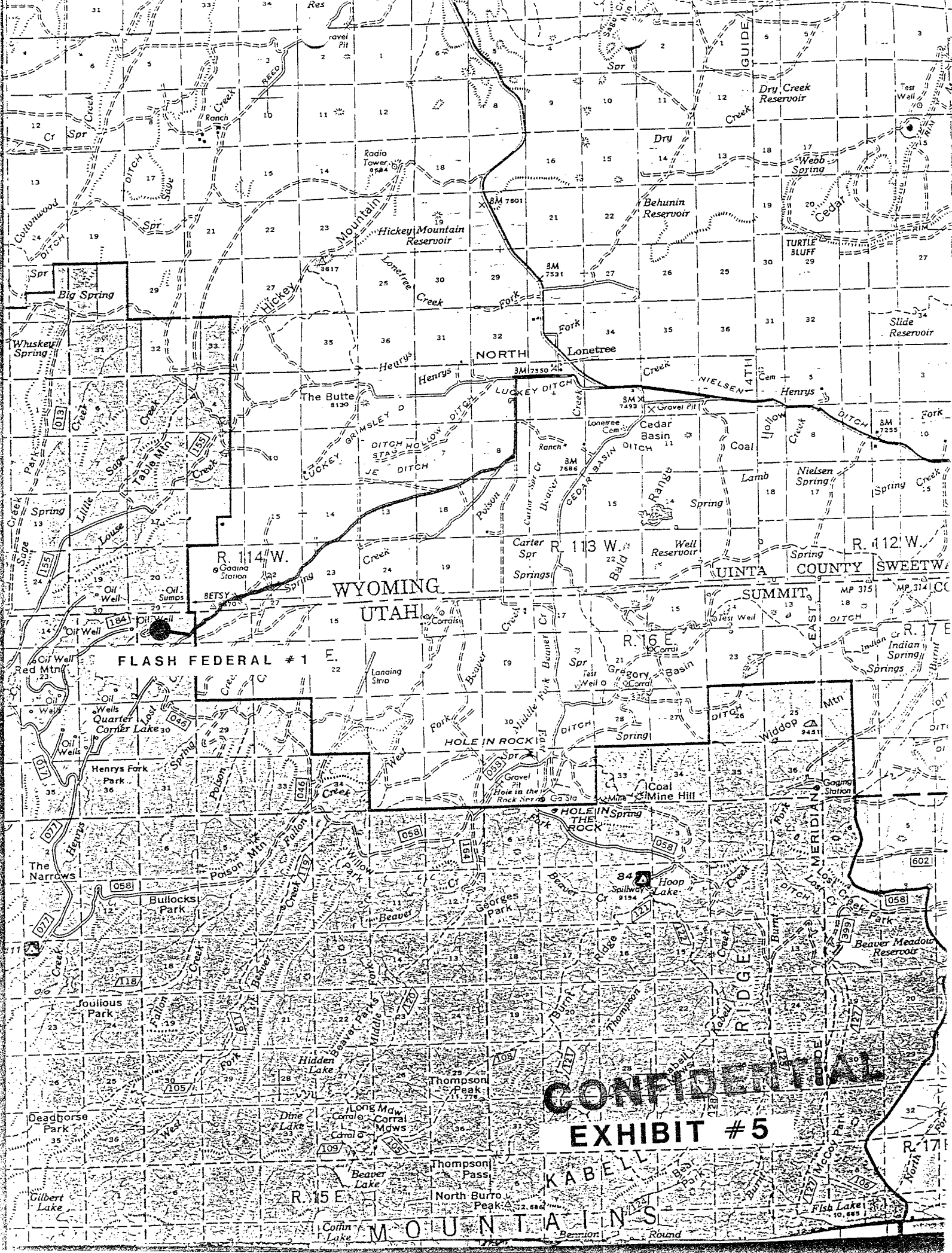


F O R E S T



CONFIDENTIAL
EXHIBIT #5

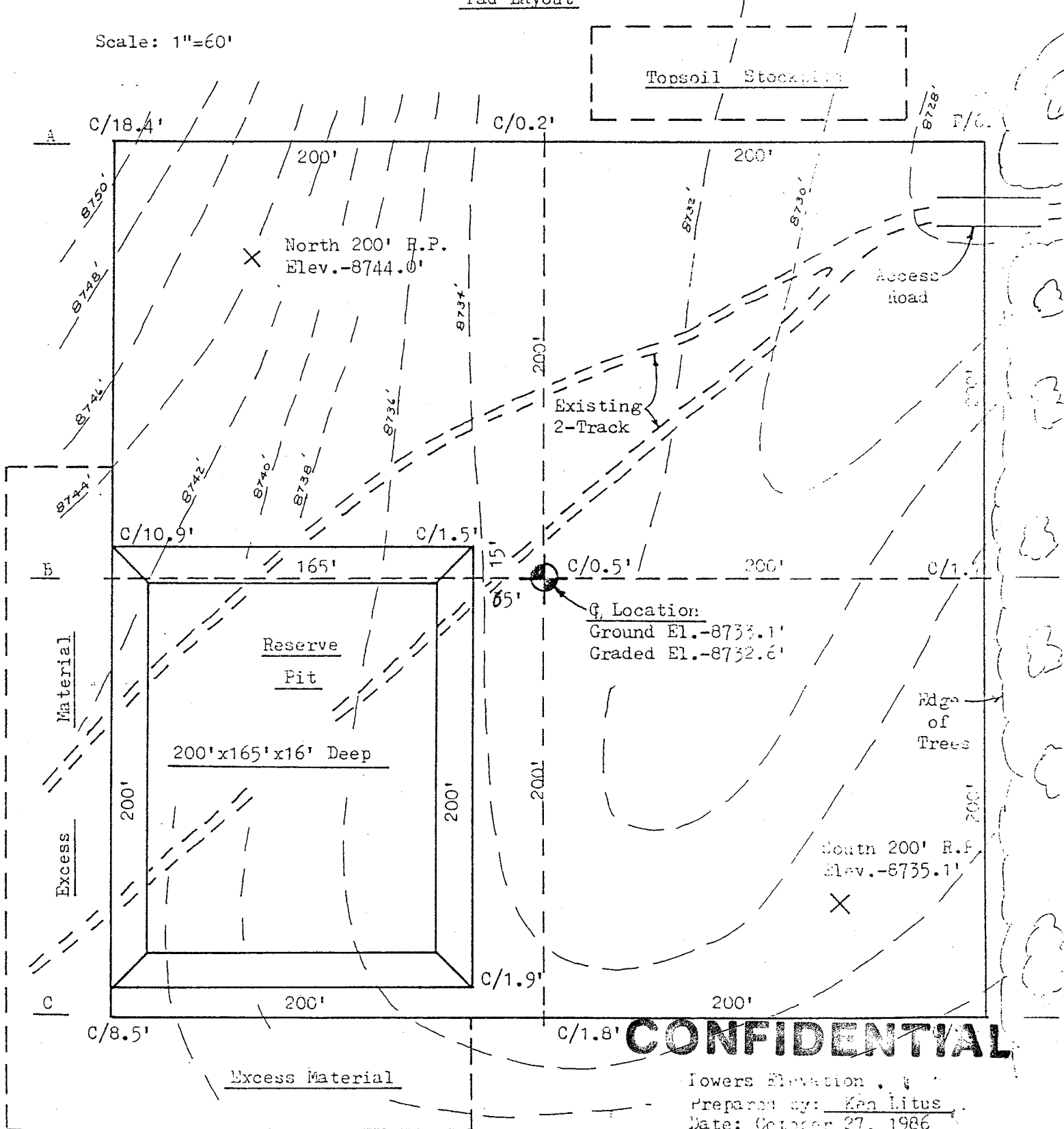
PROPOSED ROADS
EXISTING ROADS



Flash Federal #1
900' FSL & 2600' FWL
Section 16, T3N, R15E
Summit Co., Utah

Pad Layout

Scale: 1"=60'



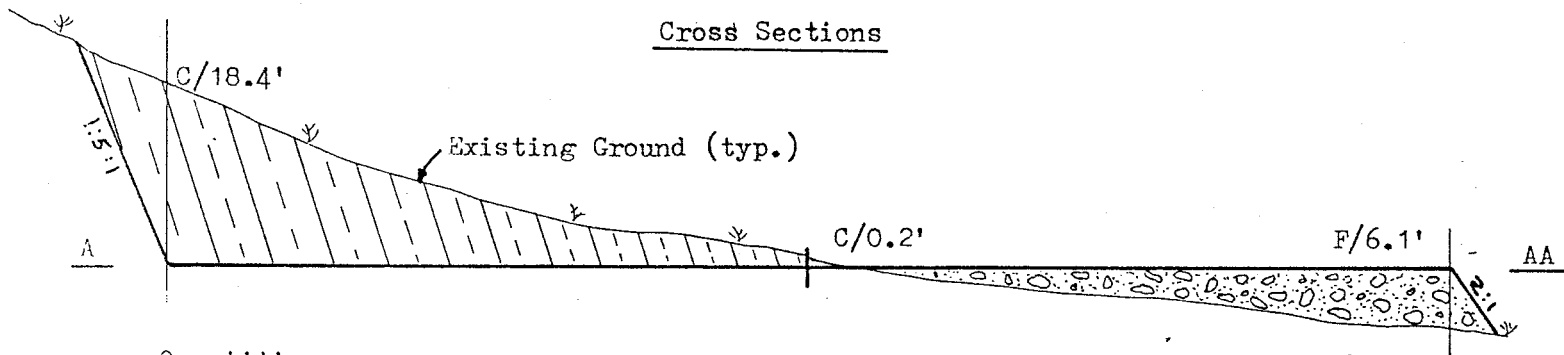
Lower Elevation . . .
Prepared by: Ken Litus
Date: October 27, 1986

EXHIBIT #6

Sun Exploration & Production Company

Flash Federal #1
900' FSL & 2600' FWL
Section 18, T3N, R15E
Summit Co., Utah

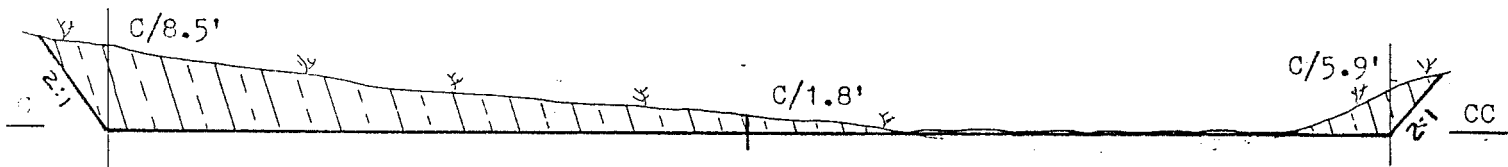
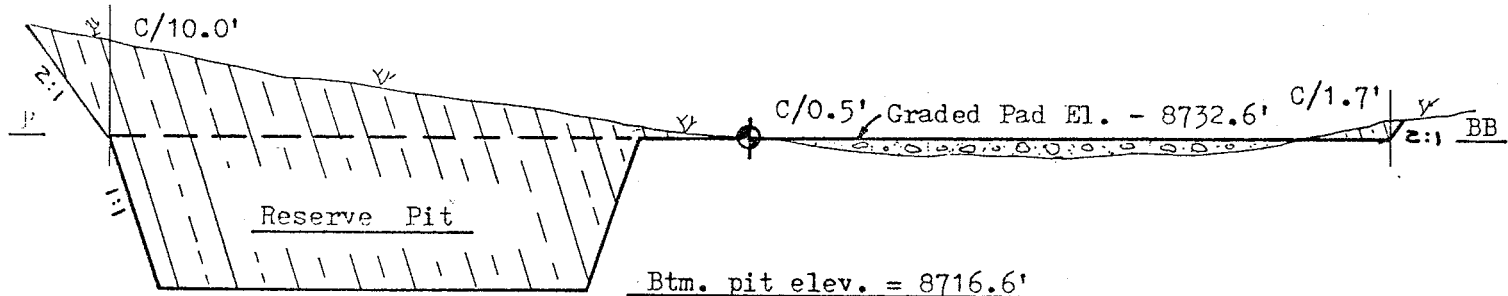
Cross Sections



Quantities:

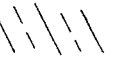
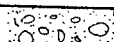
Topsoil - 3,800 cu.yds.
Cut - 16,800 cu.yds.
Fill - 9,400 cu.yds.
Pit - 16,700 cu.yds.

Notes: Quantities calculated after topsoil removal. Topsoil depth = 0.5'. Fill quantity calculated using 20% shrinkage factor.



Scale

Vert. - 1"=20'
Horz. - 1"=60'

Cut 
Fill 

CONFIDENTIAL

Powers Elevation

Prepared by: Ken Litus
Date: October 27, 1986

EXHIBIT #7

Flash Federal #1
900' FSL & 2600' FWL
Section 18, T3N, R15E
Summit Co., Utah

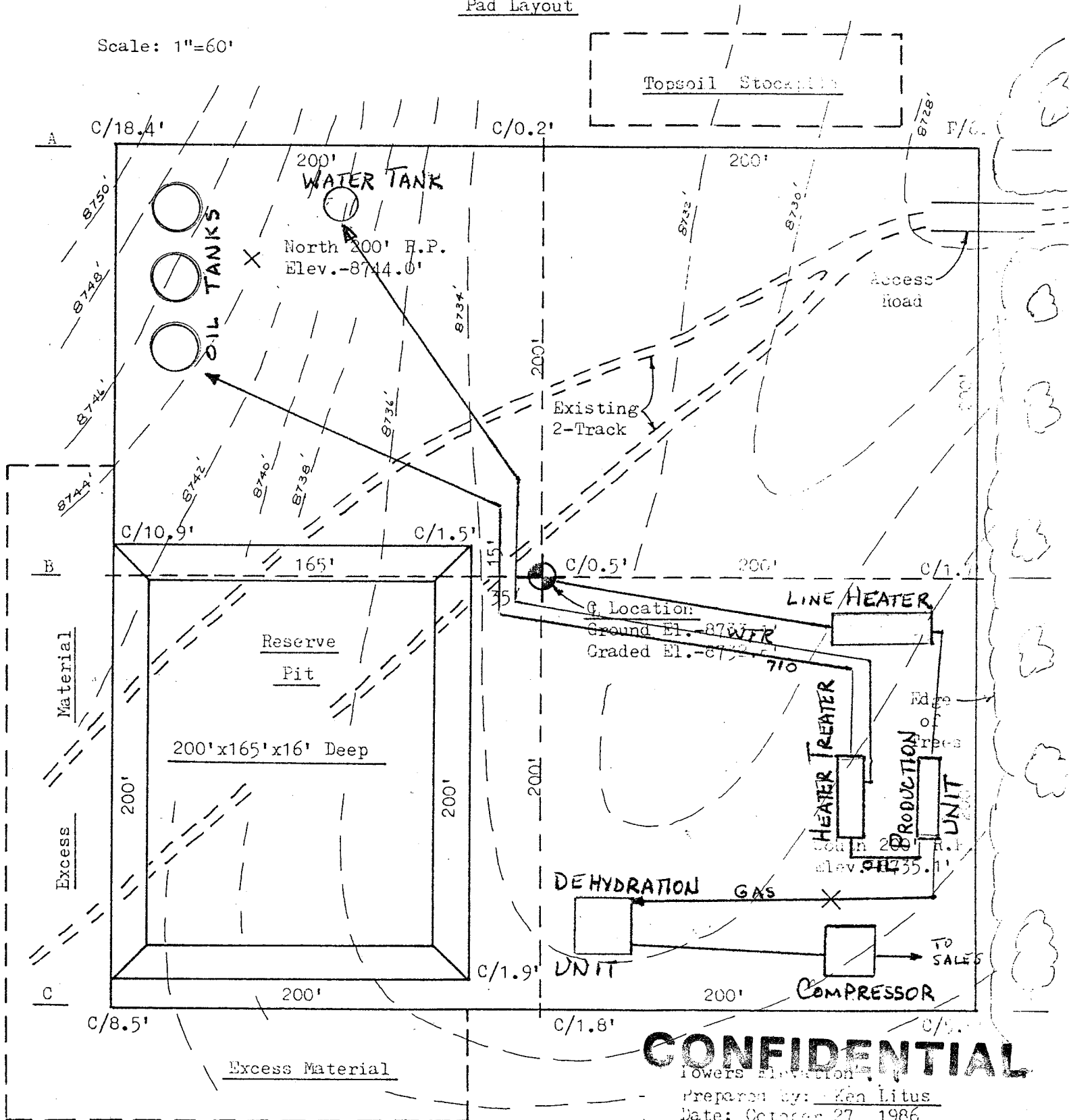
Scale: 1"=60'



Flash Federal #1
900' FSL & 2600' FWL
Section 18, T3N, R15E
Summit Co., Utah

Pad Layout

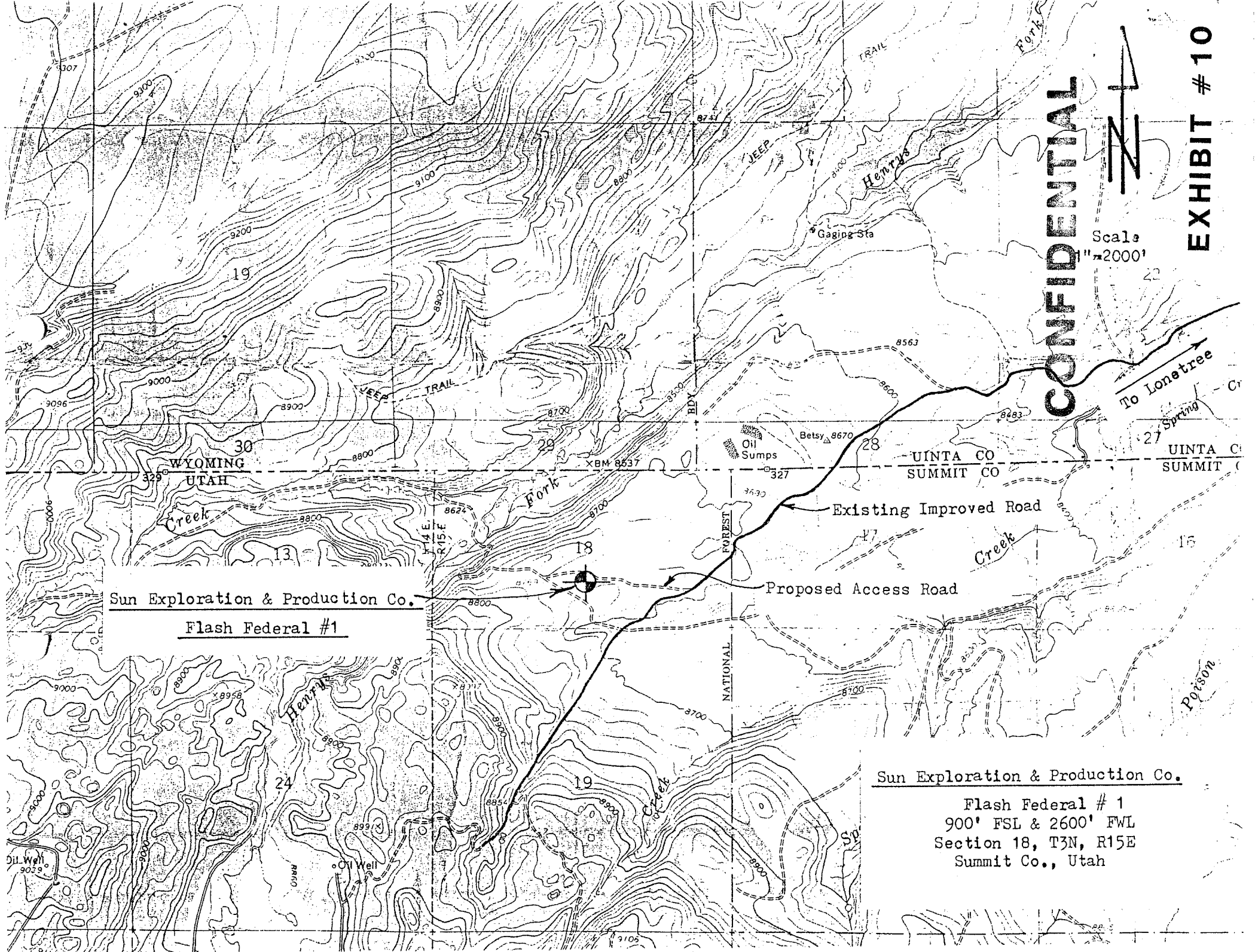
Scale: 1"=60'



CONFIDENTIAL

Scale:
" = 2000'

EXHIBIT #10



Sun Exploration & Production Co.

Flash Federal #1

Sun Exploration & Production Co.

Flash Federal # 1
900' FSL & 2600' FWL
Section 18, T3N, R15E
Summit Co., Utah

CONFIDENTIAL

011323

OPERATOR Sun Exploration & Prod. Co. DATE 11-14-86
WELL NAME Head Federal 1
SEC SE SW 18 T 3N R 15E COUNTY Summit

43-043-30282
API NUMBER

Oil
TYPE OF LEASE

CHECK OFF:

☒

PLAT

☒

BOND

☒

NEAREST
WELL

☒

LEASE

☒

FIELD

☒

POTASH OR
OIL SHALE

PROCESSING COMMENTS:

No other wells in Sec. 18

Need water permit

Exception letter received

CONFIDENTIAL
PERIOD
EXPIRED
ON 6-06-89
7-05-88

APPROVAL LETTER:

SPACING: ☐ 203 _____ UNIT

☐ 302

☐

CAUSE NO. & DATE

☒

302.1

STIPULATIONS:

Water



December 18, 1986

RECEIVED
DEC 22 1986

**Sun Exploration and
Production Company**
Four NorthPark East
5656 Blackwell
P O Box 2880
Dallas TX 75221-2880
214 890 6000

**DIVISION OF
OIL, GAS & MINING**

Utah Division of
Oil, Gas and Mining
3 Triad Center, Suite 350
355 West North Temple
Salt Lake City, UT 84180-1203

RE: Application for a Location Exception
Pursuant to Statewide Rule 302.1
Section 18-T3N-R15E, Summit County, Utah

Gentlemen:

Pursuant to the rules and regulations authorizing the granting of an exception to the locating and sitting requirements of Rule 302, Sun Exploration and Production Company hereby makes application for an exception to drill a well to the Dakota Formation at a location 900' from the South line and 2600' from the West line of Section 18, Township 3 North, Range 15 East, Summit County, Utah.

This exception location is requested due to the depositional trends in the Lower Dakota which necessitate the drilling of the well at an exception location. Phillips' A-14 Well at Bridger Lake Field, Summit, Utah, and Sun's Federal #2 Well at its Luckey Ditch Unit, Uinta, Wyoming, establish this sand trend.

Within a 460 foot radius, only Phillips Petroleum Company has the right to drill. Phillips' consent to the above described exception location has been sought and such written consent is expected. I have asked Phillips to send their written consent directly to the Utah Division of Oil, Gas and Mining.


In compliance with Rule 302.1(c), I have enclosed the required plat which is designated as Exhibit A.

Please advise if I can provide any further information.

Respectively submitted,

SUN EXPLORATION AND PRODUCTION COMPANY

By:


Andrew B. Derman
Conservation Attorney

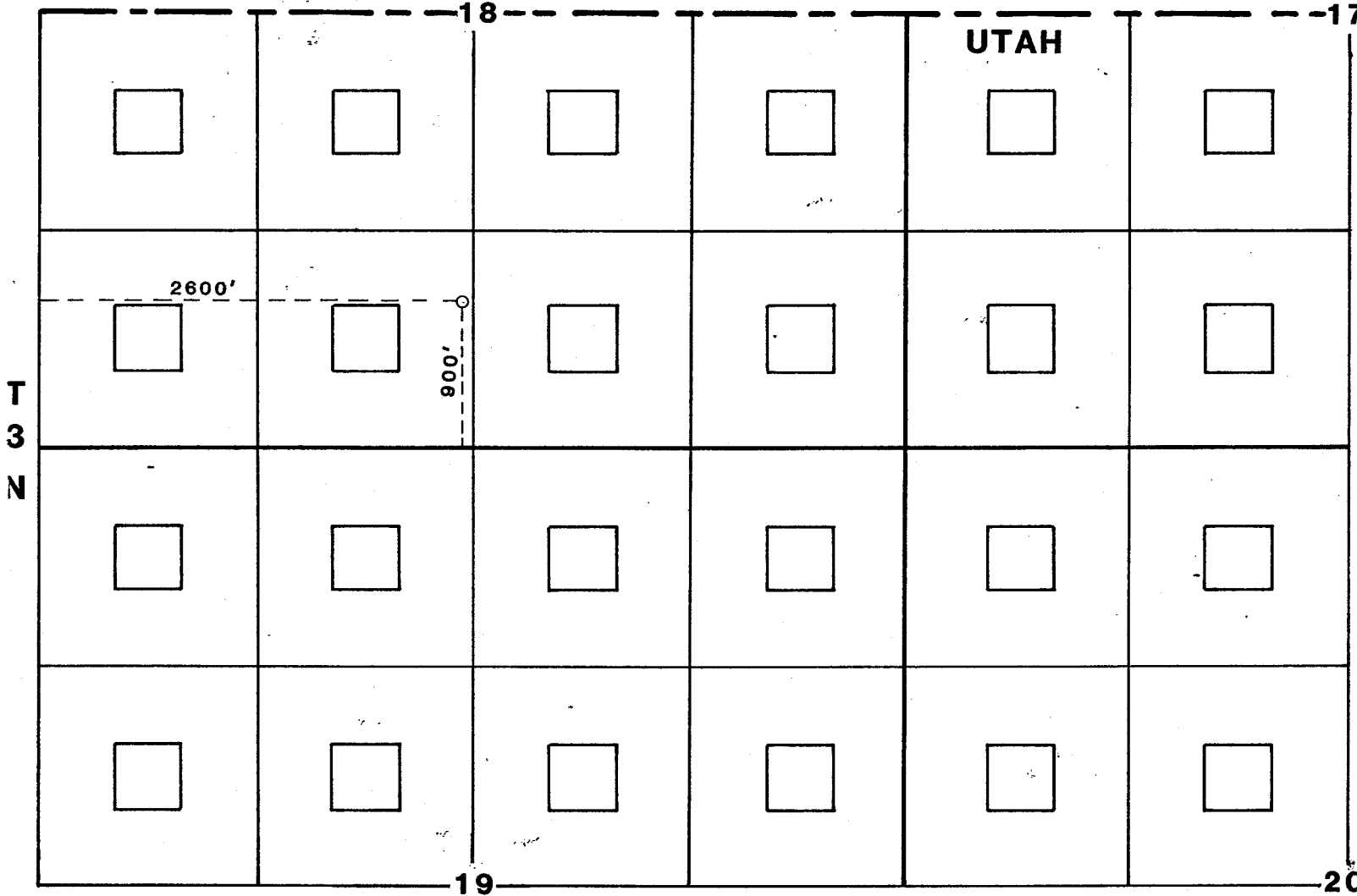
ABD:vak
Enclosure

EXHIBIT A

WYOMING

R 15 E

UTAH



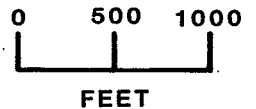
LOCATION AT WHICH WELL COULD BE
DRILLED IN COMPLIANCE WITH RULE 302



LOCATIONS OF EXISTING WELLS DRILLED TO
AND COMPLETED IN THE DAKOTA FORMATION



PROPOSED LOCATION OF SUN'S
FLASH FEDERAL NO. 1 WELL



SUMMIT COUNTY, UTAH



RECEIVED
DEC 22 1986

DIVISION OF
OIL, GAS & MINING

**Sun Production
Operations Division**
Rocky Mountain District

**Sun Exploration and
Production Company**
PO Box 5940
Terminal Annex
Denver CO 80217-5940
303 696 3500

December 17, 1986

Ms. Arlene Sollis
Division of Oil, Gas and Mining
State of Utah
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Dear Ms. Sollis:

Sun Exploration and Production Company has staked a location and applied for a permit to drill 2600' FWL and 900' FSL of Section 18, T-3N R-15E of Summit County, Utah. Section 18 is a short section. Sun Exploration and Production Company has a lease on 460' radius of the well bore as staked.

Please advise if additional information is needed.

Sincerely yours,

SUN EXPLORATION AND
PRODUCTION COMPANY

Vernon J. Hale
District Drilling Manager

VJH/mcs

cc: Cindy Thrasher

December 18, 1986

Ms. Arlene Sollis
Utah Division of
Oil, Gas and Mining
3 Triad Center, Suite 350
355 West North Temple
Salt Lake City, UT 84180-1203

RE: Application of Sun Exploration and Production Company
for Exception to Statewide Rule 302; Flash Federal #1,
Section 18, Township 3 North, Range 15 East
Summit County, Utah

Dear Ms. Sollis:

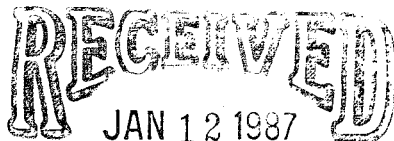
The undersigned owner is in receipt of the Application of Sun Exploration and Production Company for permission to drill the Flash Federal #1 Well at a location 900 feet from the South line and 2600 feet from the West line of Section 18, Township 3 North, Range 15 East, Summit County, Utah, as an exception to Statewide Rule 302.

The undersigned has no objection to the Application and hereby consents to the granting of such a location exception.

Yours very truly,

Thomas G. Lantz
ABD:vak *Phillips Petroleum Company*
January 7, 1987

86887 - (1)



DIVISION OF
OIL, GAS & MINING



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

January 13, 1987

Sun Exploration and Production Company
P. O. Box 5940 - Terminal Annex Station
Denver, Colorado 80217

Gentlemen:

Re: Flash Federal 1 - SE SW Sec. 18, T. 3N, R. 15E
900' FSL, 2600' FWL - Summit County, Utah

Approval to drill the referenced well is hereby granted in accordance with Rule 302.1, Oil and Gas Conservation General Rules, subject to the following stipulations:

1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water as required by Chapter 3, Title 73, Utah Code Annotated.

In addition, the following actions are necessary to fully comply with this approval:

1. Spudding notification to the Division within 24 hours after drilling operations commence.
2. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
3. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or R. J. Firth, Associate Director, (Home) 571-6068.
4. Compliance with the requirements and regulations of Rule 311.3, Associated Gas Flaring, Oil and Gas Conservation General Rules.

Page 2

Sun Exploration and Production Company
Flash Federal 1
January 13, 1987

5. Prior to commencement of the proposed drilling operations, plans for toilet facilities and the disposal of sanitary waste at the drill site shall be submitted to the local health department having jurisdiction. Any such drilling operations and any subsequent well operations must be conducted in accordance with applicable State and local health department regulations. A list of all local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (801) 533-6163.
6. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-043-30282.

Sincerely,



R. J. Firth
Associate Director, Oil & Gas

as
Enclosures
cc: Branch of Fluid Minerals
D. R. Nielson
8159T

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL ☒ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL
OIL WELL ☒ GAS WELL ☒ OTHER ☐
SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. NAME OF OPERATOR
SUN EXPLORATION & PRODUCTION COMPANY

3. ADDRESS OF OPERATOR
P.O. BOX 5940 T.A., DENVER, COLORADO 80217

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
900' FSL & 2600' FWL NESW SECTION 18
At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
8 MILES W/SW OF LONETREE WYOMING

15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any) 1310

16. NO. OF ACRES IN LEASE
1793.7

17. NO. OF ACRES ASSIGNED
TO THIS WELL
640

13. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. 5200

19. PROPOSED DEPTH
16,000

20. ROTARY OR CABLE TOOLS
ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
8733 GR

22. APPROX. DATE WORK WILL START
JULY 1, 1987

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4	9 5/8	40#	5000	1500 sx
8 3/4 - 8 1/2	5 1/2	20 & 23	16000	700 sx

THIS IS A REVISED APD TO REFLECT CHANGES IN THE DRILLING PLAN AND TO CORRECT THE SURFACE USE PLAN AS PER THE MEETING OF MARCH 3, 1987.

SUN EXPLORATION & PRODUCTION COMPANY HAS A CURRENT NATIONWIDE BOND.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new prod. zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blow preventer program, if any.

24. SIGNED Steve Stearns TITLE DISTRICT DRILLING ENGINEER DATE 5-14-87

(This space for Federal or State office use)

PERMIT NO. _____
ACCEPTED BY THE STATE
OF UTAH DIVISION OF
APPROVED BY _____ TITLE
CONDITIONS OF APPROVAL, IF ANY: OIL, GAS, AND MINING

RECEIVED
MAY 20 1987

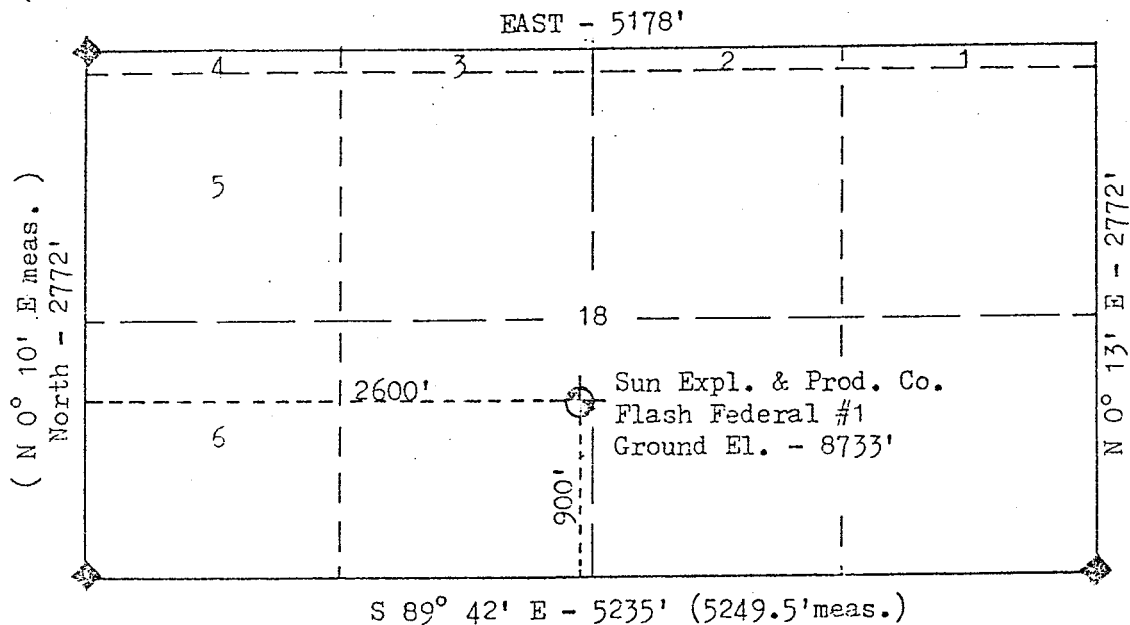
DATE: 5-22-87
BY: John R. Bays
See Instructions On Reverse Side

DIVISION OF
OIL, GAS & MINING

Federal approval of this action
is required before commencing
operations.

Title 18 U.S.C. Section 1001 makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

R. 15 E.



NOTES:

1. Basis of Bearing is S 89° 42' E on the south line of Section 18.
2. Bearings and distances are GLO plat dimensions unless otherwise noted.
3. ♦ Indicates IPBC found.

Scale: 1"=1000'

Powers Elevation of Denver, Colorado has in accordance with a request from Dale Fessler for Sun Exploration & Production Company determined the location of Flash Federal #1 to be 900' FSL & 2600' FWL Section 18 , Township 3 North Range 15 East of the Salt Lake Base and Meridian, Summit County, Utah.

I hereby certify that this plat is an accurate representation of a correct survey showing the location of Flash Federal #1.

Date: October 27, 1986

J. Nelson
Licensed Land Surveyor No. 2711
State

EXHIBIT # 1

SUN EXPLORATION AND PRODUCTION COMPANY

REVISED 8 PT. PLAN (5-7-87)

Lease # U-27918, Flash Federal #1

Uinta County, Wyoming

Drilling Prognosis

1. Estimated Tops of Geologic Markers

Bridger	Surface
Green River/Wasatch	1,408'
Fort Union	7,376'
Coal Seams	8,000-10,000'
Mesaverde	10,596'
Hilliard	12,339'
Frontier	14,721'
Mowry	14,856'
Dakota	15,076'
TD	16,000'

2. Estimated Depths of Anticipated Water, Oil, Gas or Mineral Formations

Green River/Wasatch	1,408'	Water Possible
Fort Union	7,376'	Water Possible
Mesaverde	10,596'	Oil/Gas Possible
Frontier	14,721'	Oil/Gas Possible
Dakota	15,076'	Oil/Gas Possible

If any shallow water zones are encountered, they will be adequately protected and reported; none anticipated. Potentially productive hydrocarbon zones will be cemented off.

3. Pressure Control Equipment

A. Interval(s) at which used: 0-5000'

None

B. Interval(s) at which used: 5000-16,000'

Type:

13-5/8" Double Gate Hydraulic, 13-5/8"
Annular Preventer equipped with hydraulic
choke and manifold.

3. Pressure Control Equipment (Continued)

Pressure Rating: 10,000 psi working pressure BOP's
5,000 psi working pressure annular
10,000 psi manifold

Testing Procedure: The BOP and choke manifold will be tested to 70% of the internal yield of the casing or rated working pressure whichever is less. The annular preventer will be tested to 1/2 of rated working pressure. The test will be for a period of 15 minutes upon installation, once every thirty days and/or when flange seals are broken if a "nipple up" or "nipple down" takes place.

The fill line will be 3", kill line will be 3" and choke line will be 4". BOP drills and tests will be recorded in the drillers log.

The choke manifold and BOP extension rods and handwheels will be located outside the substructure. The hydraulic BOP closing unit will be located at least 25 feet from the wellhead in the accumulator house, with a remote control unit on the rig floor available to the driller. Exact locations and configurations will depend upon the particular rig layout.

4. The Proposed Casing and Cementing Program

A. Casing Program

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt/Ft</u>	<u>Grade Joint</u>	<u>Depth Set</u>	<u>String Length</u>
20"	16" Conductor		Welded	60'	60'
12 $\frac{1}{4}$ "	9-5/8	40#	K-55 LTC	5000'	5000'
8-3/4-8-1/2"	5-1/2	20#	N-80 BTC		3200'
	5-1/2	20#	N-80 LTC		9800'
	5-1/2	23#	N-80 LTC	16,000'	3000'

Casing string will be tested to .2 psi/ft or 1000' whichever is greater prior to drilling out. Conductor pipe will not be tested.

4. The Proposed Casing and Cementing Program (Continued)

B. Cementing

Surface Casing:

1st Stage: 500 sx Howco Lite w/1% CACL2
and 1/4#/sx Flocele followed
by 300 sx Class "G" w/1% CACL2
and 1/4#/sx Flocele.

2nd Stage: 500 sx Howco Lite w/1% CACL2
(DV Tool and 1/4#/sx Flocele followed
@ 2000') by 200 sx Class "G" w/1%
CACL2 and 1/4#/sx Flocele.

Estimated TOC surface w/84% excess.

Production Casing:

350 sx Class "H" w/30% Silica Flour, .1% CFR-2 .6% Halad-24, 3% KCL, and Retarder followed by 350 sx Class "H" w/30% Silica Flour 3% KCL and .2% Super CBL and Retarder.

Estimated TOC @ 12,500' w/31% excess.

Cement volumes will be adjusted to ensure that all potentially productive hydrocarbon zones are cemented off. The actual top of cement will be determined from logs.

5. Mud Program

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-5000	Fresh water	8.3-9.0	26-40	NC
5000-7800	Fresh water	8.4-9.0	26-35	NC
7800-10,200	Low Solids Lightly dispersed Gel, ASP-700 Shale Stab., PAC	8.7-9.2	35-70	10
10,200-14,000	LSTD, same as above	9.0-11	35-50	10
14,000-TD	3% KCL mud, gel ASP-700, PAC, shale stabilizer	9.5-11	40-50	8-10

Sufficient mud material to maintain mud properties, control lost circulation and prevent a blowout will be available at the wellsite.

6. Evaluation Process

Logs:	DIL/SFL/CNL	Total Depth to 14,000'
	FDC-GR/Sonic-BHC	Total Depth to 14,000'
	GR	TD to Surface

DST's: None

Cores: 2 - 60 foot cores in Dakota

Evaluation process may change at the discretion of the wellsite geologist with the approval of the BLM.

Stimulation: No stimulation or frac treatment has been formulated for this test. The BLM will be notified by "Sundry Notice" prior to any completion activity with a complete frac program. The drillsite as approved, will be of sufficient size to accommodate all completion activity.

7. Abnormal Conditions

No abnormal temperatures or pressures are anticipated. No H₂S has been reported or known to exist from previous drilling in the area to this depth. Maximum anticipated bottom hole pressure is 6836 psi.

8. Drilling Activity and Auxiliary Equipment

A. Drilling Activity

Anticipated Commencement Date:	July 1, 1987
Drilling Days:	Approximately 75 days
Completion Days:	Approximately 30 days

B. Auxiliary Equipment

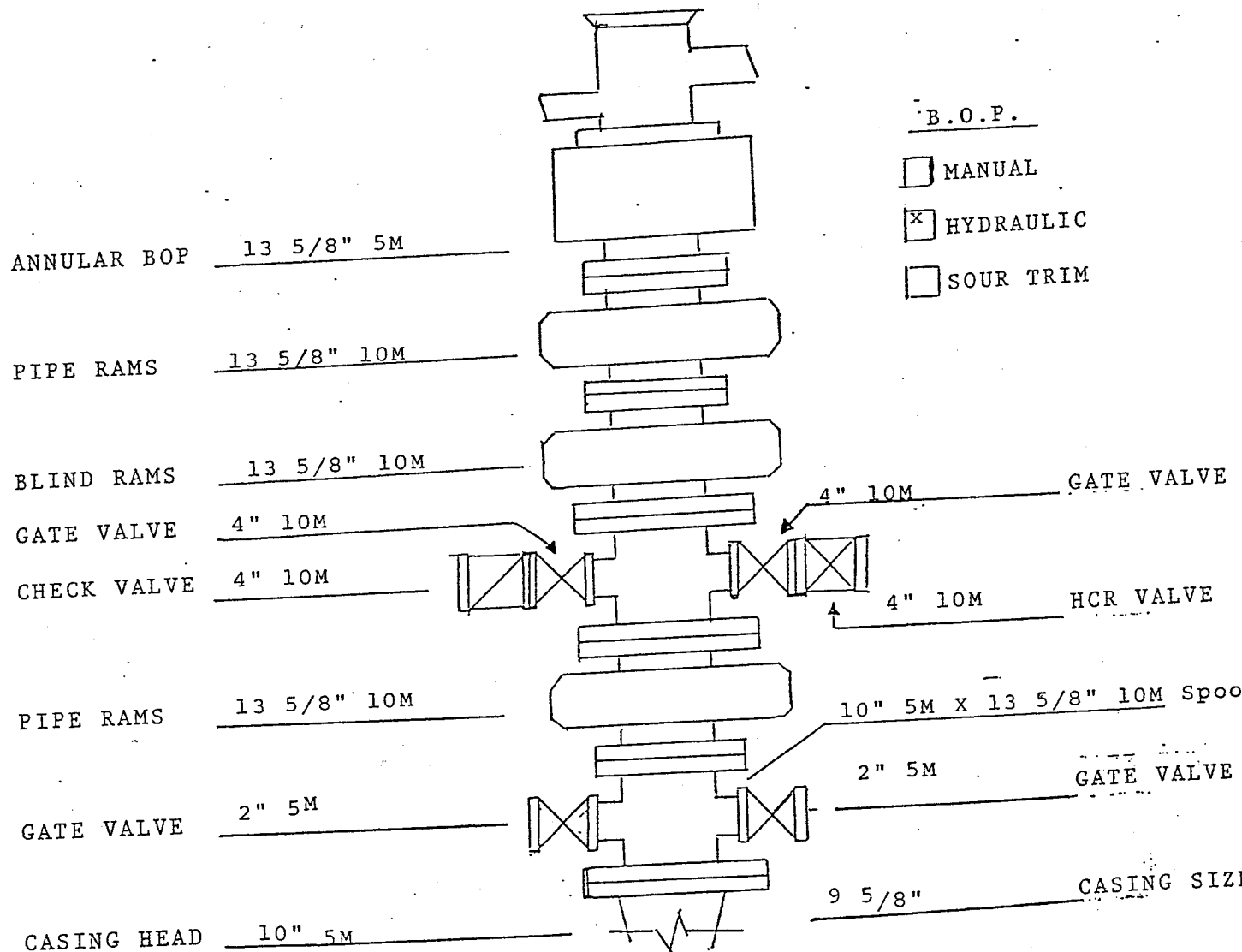
- 1) A Kelley Cock will be kept in string at all times.
- 2) Periodic checks will be made each tour of the mud system.
- 3) A Stabbing Valve will be kept on the derrick floor to be stabbed into the drill string whenever the Kelley is not in the string.
- 4) No float will be used in the drill string.
- 5) A Flow Sensor will be used from 5000' to TD.

COMPANY SUN EXPLORATION

WELL NAME FLASH FEDERAL #1

LOCATION NE SW SECTION 18 T3N R15E

INTERVAL TO BE USED 5000' - 16000'



TEST PROCEDURE

- 1) Ram type preventers will be tested to rated working pressure of stack or 70% of internal yield of casing whichever is less.
- 2) Annular type preventers will be tested to 50% of rated working pressure.
- 3) BOP will be tested at time of installation and at least every 30 days. Pipe rams will be operated once each 24 hours and blind rams will be tested on trips.

BOP PROCEDURES AND DRILLS

- 1) Approved close in procedure to be posted on the rig floor.
- 2) Each rig crew to hold a close in drill weekly.
- 3) Drills will be noted on IADC daily drilling report at the rig.

AUXILLIARY BOP EQUIPMENT

- 1) Upper and lower kelly valve (in use)
- 2) Safety valve (rig floor)
- 3) Inside BOP valve (rig floor)
- 4) Extra drill pipe to drill collar sub (rig floor)

CHOKE MANIFOLD

All valves and fittings will be rated at 10,000 working pressure.

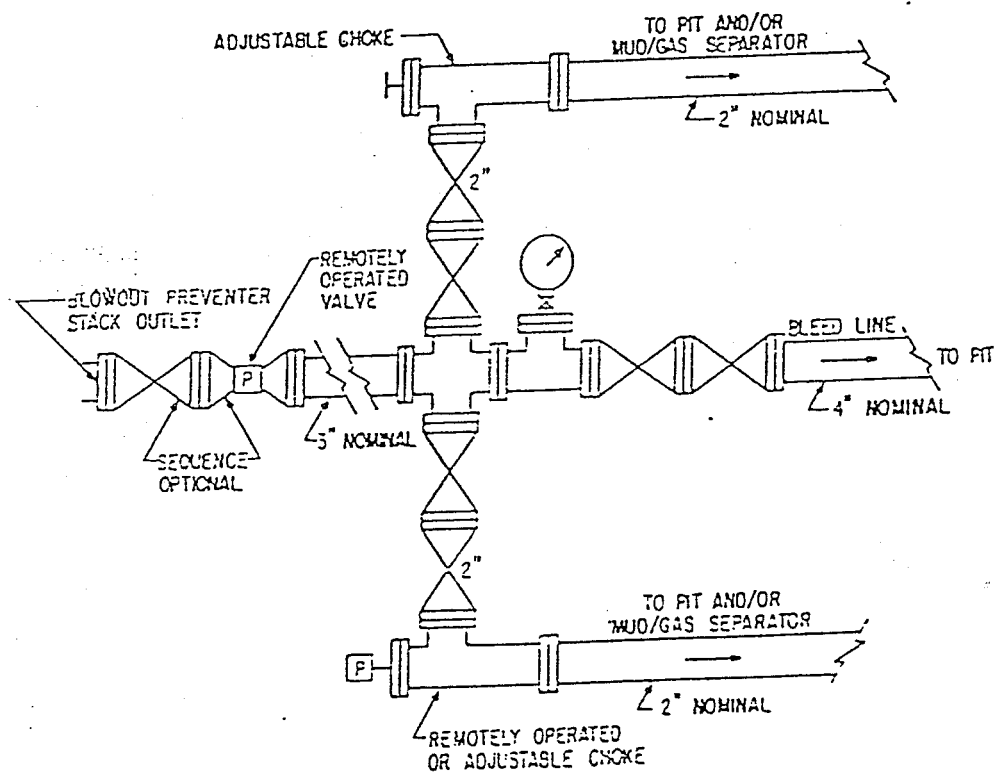


FIG. 3.A.2

TYPICAL CHOKE MANIFOLD ASSEMBLY FOR 10M
RATED WORKING PRESSURE SERVICE -
SURFACE INSTALLATION

EXHIBIT #3

BOP ACTUATING SYSTEM

- 1) Accumulator capacity will supply $1\frac{1}{2}$ times volume necessary to close all BOP equipment units with a minimum pressure of 203 psi above pre-charge pressure.
- 2) Accumulator back up system supplied by a secondary power source independent of primary power source, will be provided with sufficient capacity to close all blowout preventers.
- 3) Locking devices will be provided on ram type preventers.
- 4) Primary BOP actuating control will be hydraulic and located either in the dog house or on the rig floor. Back up control will be provided by hand-wheel manual operation of BOP.

MULTIPOINT SURFACE USE AND OPERATIONAL PLAN

Sun Exploration & Production Company
Flash Federal #1
NESW Sec. 18 T3N, R15E
Summit County, Utah

1. Existing Roads

- A. The proposed well site and elevation plat is shown as Exhibit #1.
- B. From Lone Tree, Wyoming, go 1 mile west on gravel road turn south and go $1\frac{1}{2}$ miles. Turn west and go $\frac{1}{2}$ mile to "Y" take the road to the right for $7\frac{1}{4}$ miles. Turn to the right $\frac{1}{3}$ mile into location.
- C. Approximately $\frac{1}{3}$ mile of new road will be built.
- D. All roads within a one mile radius are shown on Exhibit #5.
- E. The existing roads will need no improvement only maintenance. From there the road will be flat bladed to a width of 14' feet. All existing roads will be maintained in the same condition.
- F. The existing Forest Service Road will have to be cut down 2-3 feet at the top of the hill to insure a safe sight distance.

2. Planned Access Roads

- A. A map showing all necessary roads is attached as Exhibit #5.
 - 1. The access road will be flat bladed to a width of 14 feet on the running surface.
 - 2. The maximum grade will be 7 percent.
 - 3. There will be turnouts every 1000'.
 - 4. The road will have drainage ditches.
 - 5. If culverts are needed, their size and location will be determined at the onsite.
 - 6. No major cuts and fills are expected.
 - 7. The new access road to be built was centerline flagged during staking.
- B. The Production Road
 - 1. If production is obtained the access road will be upgraded and maintained as necessary to prevent soil erosion and to accommodate year round traffic.
 - 2. The access road will be maintained with the side slope construction with a 14' surface.

C. Location of Existing Wells

1. There are no water wells within a one mile radius.
2. There are no disposal wells within a one mile radius.
3. There are no injection wells within a one mile radius.
4. There are no abandoned wells within a one mile radius.
5. There are no temporarily abandoned wells within a one mile radius.
6. There are no monitoring wells within a one mile radius.
7. There are no shut-in wells within a one mile radius.
8. There is 1 producing well within a 1 mile radius which is located in the NWNE of Section 13 T3N R15E Summit County, Utah, and a Phillips (A-12) dryhole in NE/4 of Section 13.

3. Location of Existing and/or Proposed Facilities

A. If the well is productive a tank battery will be constructed on the location.

1. The sundry notice will be submitted for the production facilities.
2. All flowlines will be buried. Any necessary pits will be fenced and flagged to protect wildlife. The pad will be constructed with the native soil from the site and possibly some gravel.

B. If the Well is a Producer

1. Those areas not required for production, will be landscaped to the surrounding topography.
2. A reclamation plan will be submitted when the well is finished.
3. The backslope will be reduced to $2\frac{1}{2}$:1 and the foreslope to $2\frac{1}{2}$:1. Reduce slopes by pulling fill material up from foreslope into the toe of cut slopes.
4. Production facilities (including dikes) will be placed on the cut portion of the location and a minimum of 5 feet from the toe of the back cut.
5. A dike will be constructed completely around the production facilities (I.E. production tanks, water tanks, and/or heater-treater). The dikes for the production facilities must be constructed of compacted subsoil hold the capacity of the largest tank, and be independent of the back cut. Any production pits will be fenced with at least four (4) strands of barbed wire and held in place by side posts and corner H-braces.
6. The stockpiled topsoil will be distributed evenly over those areas not required for production and reseed as recommended by surface owner.

4. Location and Type of Water Supply

- A. Water will be furnished by Sun.
- B. Water will be transported by truck over existing lease roads.
- C. No water well will be drilled on this lease.

5. Construction Materials

- A. Only the native soils will be used for construction of the wellsite and access.
- B. Gravel materials will be used on the access and wellsite.
- C. The above materials are not federally owned.
- D. No additional roads will be constructed for the purpose of hauling materials.
- E. The reserve pit will be lined w/2-3" of bentonite or natural clay.

6. Methods for Handling Waste Material

- A&B. All drill cuttings and drilling fluids will be disposed of in the reserve pit. The pit will be back filled after it has dried. All gas used in drilling will be burned.
- C. There will be no burn pit. All trash will be disposed of in a wire mesh cage and hauled from the forest to a refuse site.
- D. All salts will be deposited in the reserve pit.
- E. All chemicals will be deposited in the reserve pit.
- F. Sewage shall be placed in a self-contained, chemically treated porta-potty. Any sewage left on location will be buried at least six (6) feet deep upon well completion.
- G. After the rig moves out, all materials will be cleaned up and no adverse materials will be left on location.
- H. Any produced oil or condensate recovered during testing will be placed in tanks on the location.
- I. Produced water will be put in the reserve pit during completion work per NTL-2B.

7. Auxiliary Facilities

- A. No camps or airstrips will be constructed at this location.

8. Wellsite Layout

- A. Please refer to Exhibit #7 for cross section.
- B. Please refer to Exhibit #8 for location layout.
- C. Please refer to Exhibit #9 for production facilities.
- D. Please refer to Exhibit #10 for the access road routing.
- E. DURING CONSTRUCTION

1. The top 6 inches of soil will be removed from the location including areas of cut, fill, and/or subsoil storage areas and stockpiled at the site.
2. The operator will not push soil material and overburden over side slopes or into drainages. All soil material disturbed will be placed in an area where it can be retrieved.
3. If there is snow on the ground when construction begins, the operator will remove it before the soil is disturbed, and pile it downhill from the topsoil stockpile location.
4. The backslopes will be constructed no steeper than $1\frac{1}{2}:1$, and the foreslope no steeper than $1\frac{1}{2}:1$.
5. A 20' vegetative border will be maintained between toe-of-fill of pad and/or pit areas and the edge of adjacent drainages.
6. The reserve pit will be constructed with a minimum of one-half ($1/2$) the total depth below the original ground surface on the lowest point within the pit.
7. The reserve pit will be designed to prevent the collection of surface runoff.
8. If any cultural values are observed during construction and operations, leave them intact and notify the Area Manager, Bureau of Land Management, Salt Lake City, Utah. See Exhibit #4 for Cultural Resource Report.
9. If paleontological resources, either large and conspicuous, and/or of significant scientific value are discovered during construction, the find will be reported to the Authorized Officer immediately. Construction will be suspended within 250 feet of said find. An evaluation of the paleontological discovery will be made by a BLM approved professional paleontologist within five (5) working days, weather permitting, to determine the appropriate action(s) to prevent the potential loss of any significant paleontological values. Operations within 250 feet of such a discovery will not be resumed until written authorization to proceed is issued by the Authorized Officer. The applicant will bear the cost of any required paleontological appraisals, surface collection of fossils, or salvage of any large conspicuous fossils of significant scientific interest discovered during the operations.

E. During Operations

1. All equipment and vehicles will be confined to the access road, pad, and area specified in the APD.
2. The reserve pit will be fenced on three (3) sides during drilling and the fourth side at the time the rig is removed.
3. The location will be fenced on four (4) sides.

9. Surface Owner

Wasatch National Forest, USA
Mountain View, Wyoming

A. IF THE WELL IS DRY HOLE

1. A Notice of Intent to Abandon and a Subsequent Report of Abandonment must be submitted for abandonment approval.

10. Plans for Restoration of Surface

- A. If well is abandoned, site will be restored to original condition as nearly as possible. Backfilling, leveling and contouring are planned as soon as all pits have dried. Waste and trash will be buried or burned, and unused drilling materials will be removed from site, immediately after drilling is completed. If production is obtained, the unused area will be restored as soon as possible.
- B. The soil banked material will be spread over the area. Revegetation will be accomplished by planting mixed grasses as per formula provided by the BLM.
- C. Three sides of the reserve pit will be fenced during drilling operations. Prior to rig release, the reserve pit will be fenced on the fourth side to prevent livestock or wildlife from entering; and the fencing will be maintained until leveling and clean up are accomplished.
- D. If any oil is on the pits and is not immediately removed, the pit containing the oil or other adverse substances will be flagged overhead or covered with wire mesh.
- E. All rehabilitation operations will be done according to an approved reclamation plan.

11. Other information

- A. The primary surface use is for grazing livestock. All work will be done in accordance with BLM stipulations.

12. Lessee's or operator's representative

Vernon J. Hale
P.O. Box 5940 T.A.
Denver, Colorado 80217
(303) 696-3500

13. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by SUN EXPLORATION AND PRODUCTION COMPANY and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

5-14-87
Date

Vernon J. Hale
District Drilling Manager

Cultural Resource Management Report

Sun Exploration and Production Company

Flash Prospect

Summit County, Utah

Lead Field Investigator

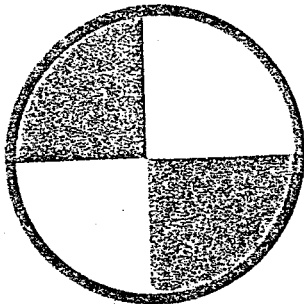
Brian P. O'Neil, M.A.

Principal Investigator

Marcia J. Tate, M.A.

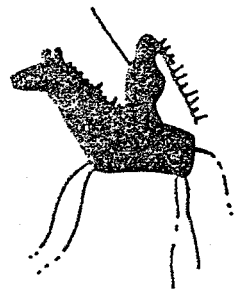
Date Oct. 27, 1986 For

Sun Exploration
and Production Company



POWERS ELEVATION

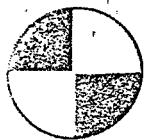
P.O. Box 2612
Denver, Colorado 80201-2612
(303) 321-2217



Archaeology Department

A DIVISION OF PETROLEUM INFORMATION CORPORATION AN A.C. NIELSEN COMPANY

EXHIBIT #4



Powers Elevation, Inc.

OIL WELL ELEVATIONS-LOCATIONS
ENVIRONMENTAL-ARCHAEOLOGICAL SERVICES
P.O. Box 2612
Denver, Colorado 80201-2612
Phone 303/321-2217
Toll Free 1-800-824-2550

PROJECT IDENTIFICATION: A cultural resources survey report for the following Flash Prospect well pad and access, Summit County, Utah; Wasatch National Forest, Mountain View Ranger District.

ANTIQUITIES PERMIT NO.: Wasatch National Forest (exp. 12/31/86)
State: U-86-Ta-695f.

FILES SEARCH: A files search was requested from the Utah Historical Society on October 23, 1986.

LOCATION: The well location is situated at 900 feet FSL and 2600 feet FWL, Section 18, T.3N., R.15E. Access road takes off from an existing Forest Service road.

MAP REFERENCE: Gilbert Peak N.E., 1967.

DATE OF INVESTIGATION: October 25, 1986.

PERSONNEL: Brian P. O'Neil, Field Investigator; Marcia J. Tate, Principal Investigator.

PROPOSED ACTION: The proposed action is the construction of a well pad with an estimated disturbance area of approximately 1-2 acres along with an access road of approximately 2000 feet in length from the center stake to the existing Forest Service road.

ENVIRONMENT: The topography consists of a broad ridge with numerous small hills and depressions formed by quaternary glacial deposits. The ridge lies between two permanent drainages, Henrys Fork to the northwest and Lost Creek to the southeast. Soils are a dark brown to tan sandy loam mixed with gravels and cobbles. Vegetation consists primarily of sagebrush, grasses, and forbs, with stands of aspen, fir, and common juniper. Vegetation cover varies from 60 to 90%. Slopes are generally 2 to 10% on the top of the broad ridge, with 40% grades occurring along the slopes to the Henrys Fork. Elevation is approximately 8,740 feet. Exposure is open.

FIELD METHODS: A 40 acre area surrounding the well pad center stake was surveyed by walking a series of parallel east-west transects at intervals of 15 meters.

Sun Exploration
and Production Company
Flash Prospect
Page 2

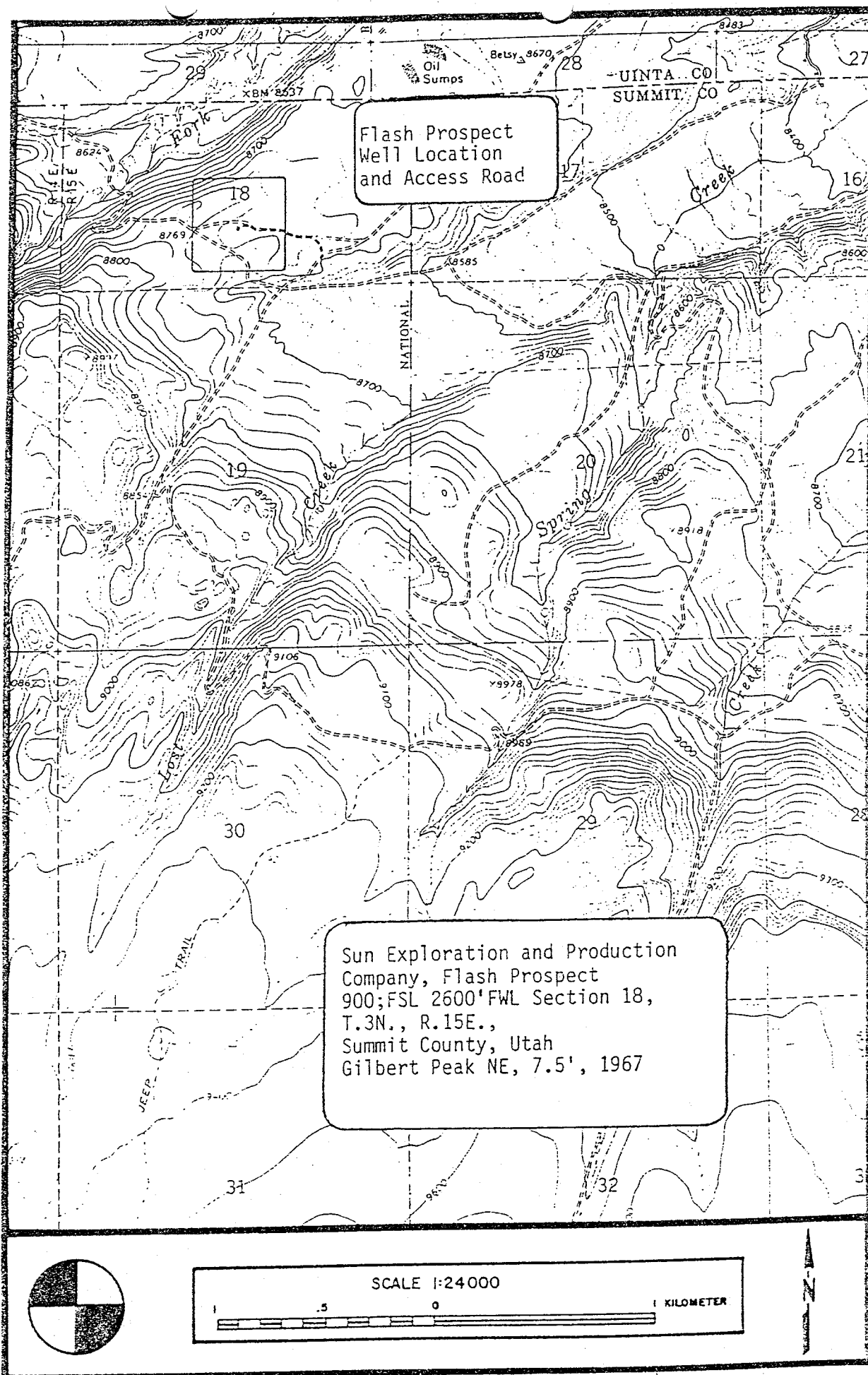
FIELD METHODS, CONTINUED: The access road was surveyed by walking a pair of sinuous transects extending 50 feet each side of the center to form a 100 foot right-of-way approximately 900 feet long outside of the 40 acres. Rodent burrows, and hills, and road cuts were examined for evidence of buried cultural materials. Approximately 42.1 acres were surveyed.

RESULTS: No prehistoric or historic cultural resources were observed within the project area.

RECOMMENDATIONS: Given the absence of cultural resources, we recommend that the project be allowed to proceed.

Marcia J. Tate 10/27/86
Marcia J. Tate Date
Principal Investigator

MJT/mk



FOREST

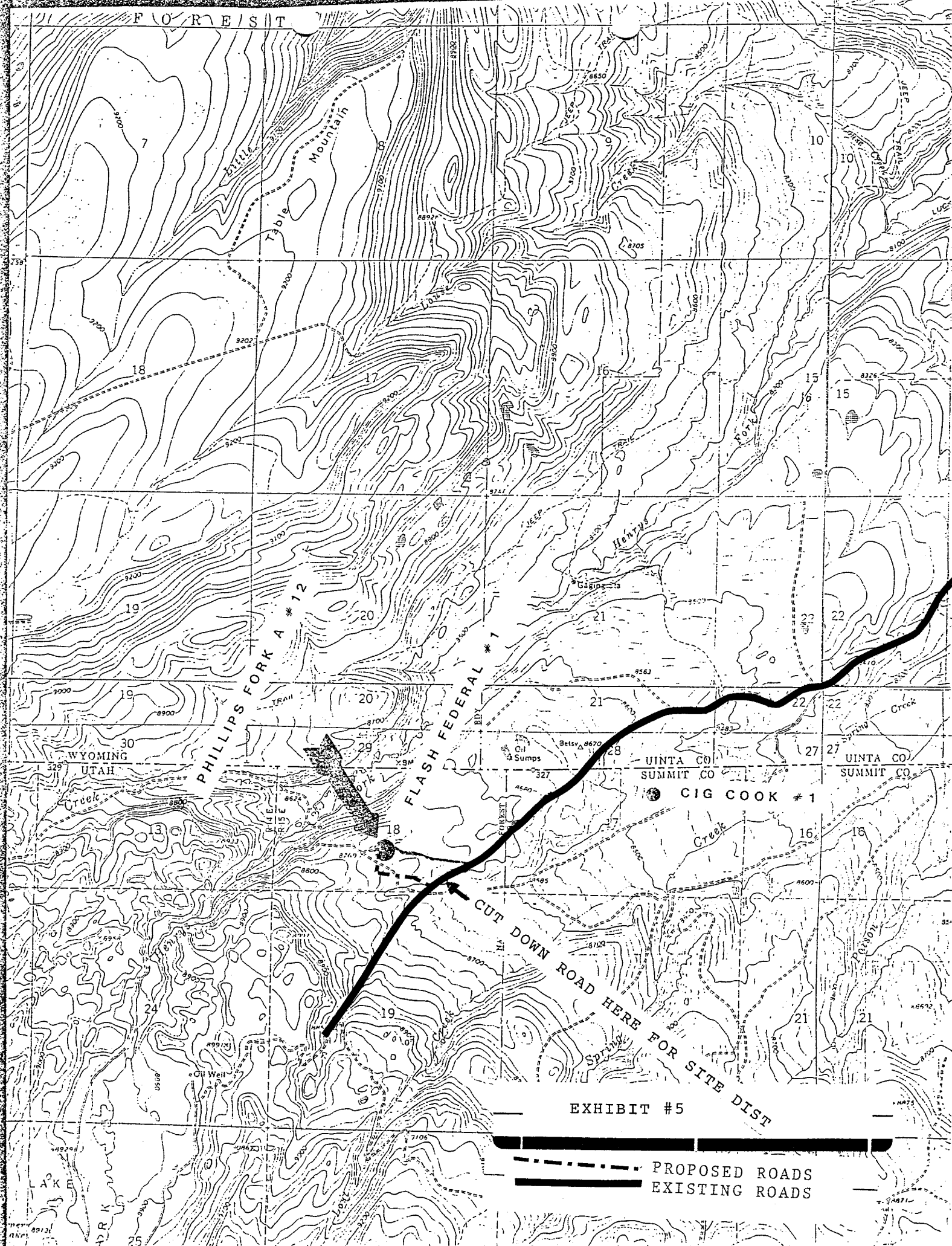


EXHIBIT #5

PROPOSED ROADS
EXISTING ROADS

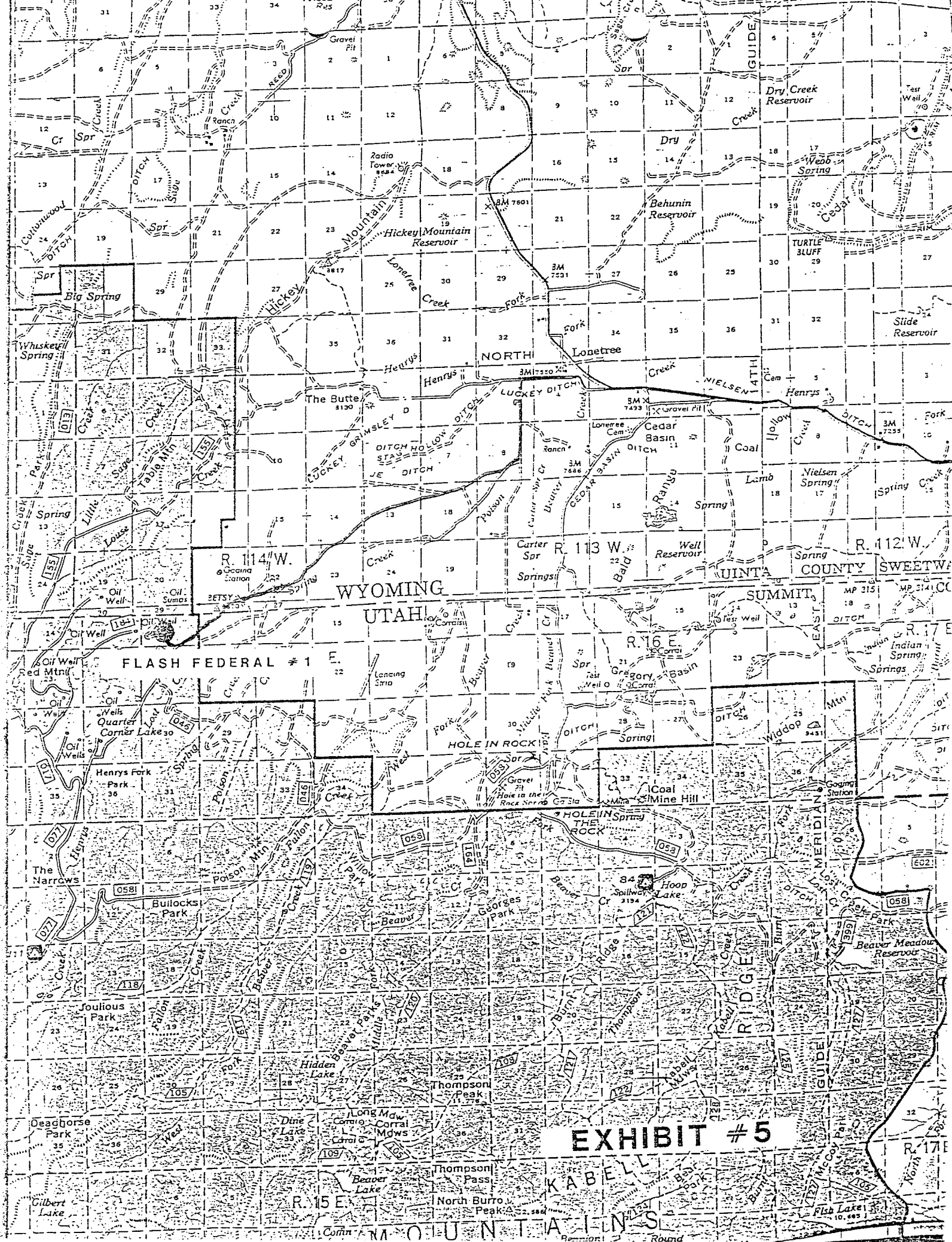


EXHIBIT #5

Scale
1"=2000'

To Lonetree
Spring

UINTA CO
SUMMIT CO

UINTA CO
SUMMIT CO

Existing Improved Road

Proposed Access Road

CUT DOWN ROAD HERE FOR THE
REQUIRED SITE DISTANCE

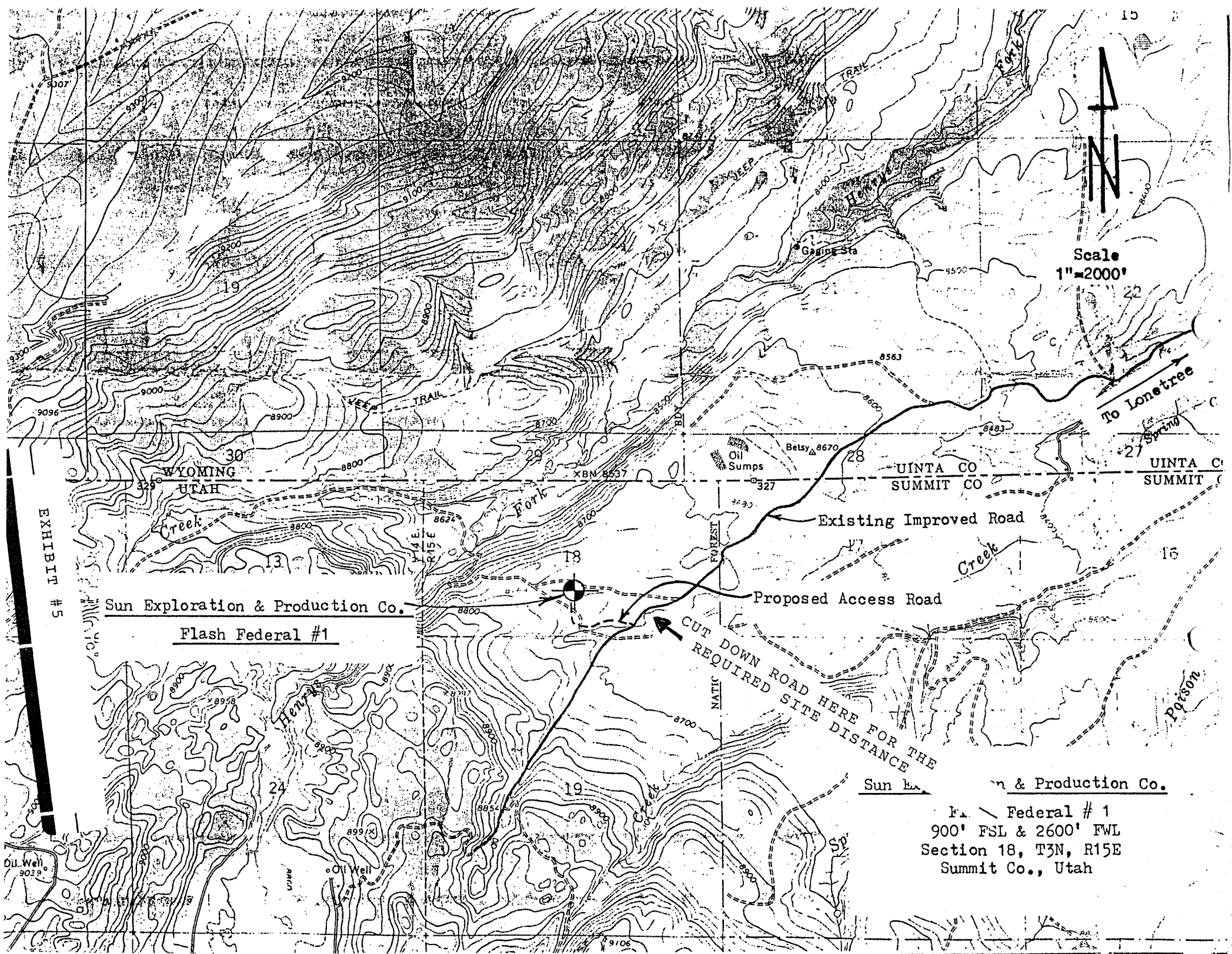
Sun Exploration & Production Co.

Flash Federal # 1
900' FSL & 2600' FWL
Section 18, T3N, R15E
Summit Co., Utah

Sun Exploration & Production Co.

Flash Federal #1

EXHIBIT #5



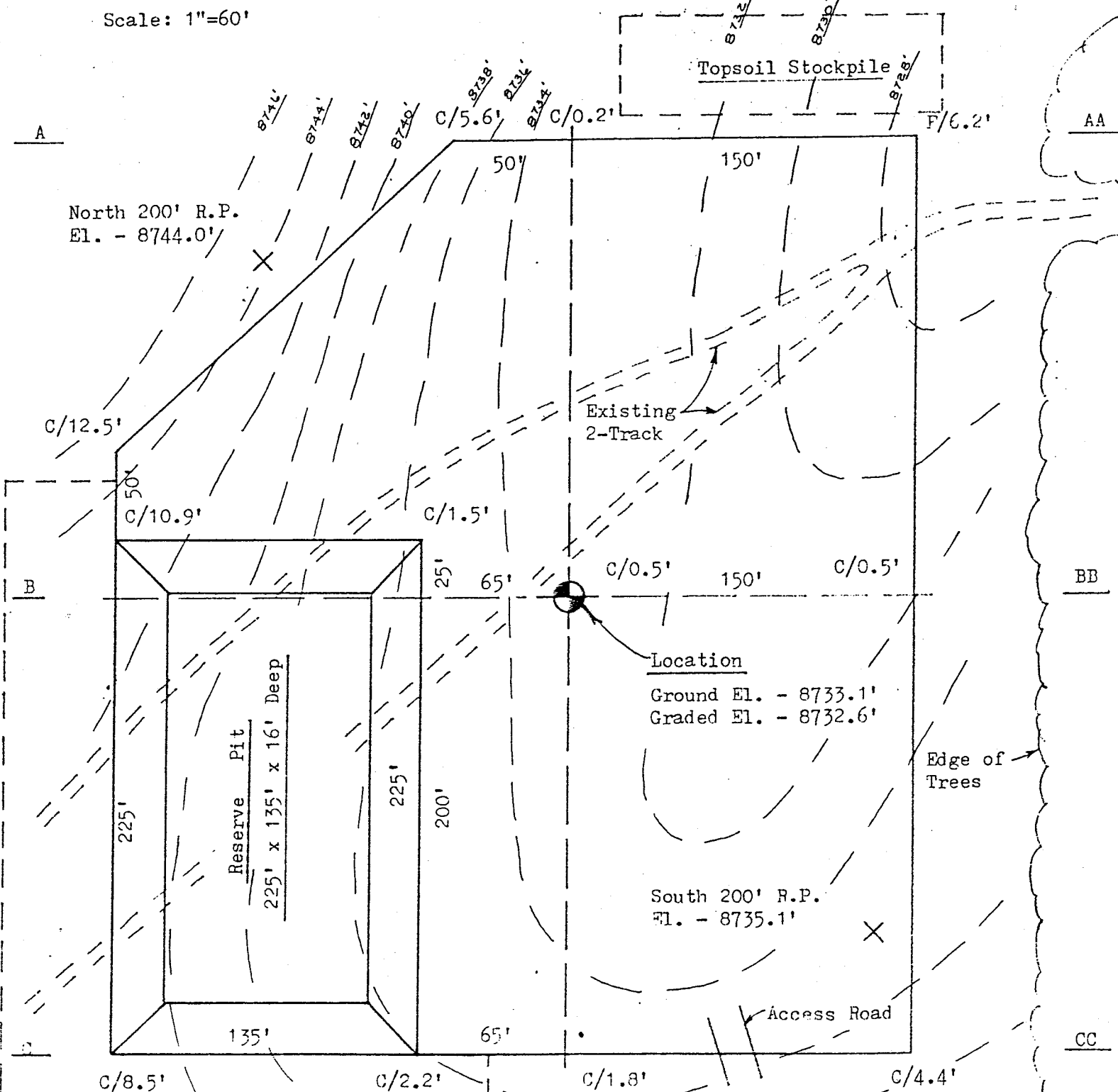
Sun Exploration & Production Company

Flash Federal #1
900' FSL & 2600' FWL
Section 18, T3N, R15E
Summit Co, Utah

Pad Layout

Scale: 1"=60'

DRAINAGE



Excess Stockpile

Powers Elevation, Inc.

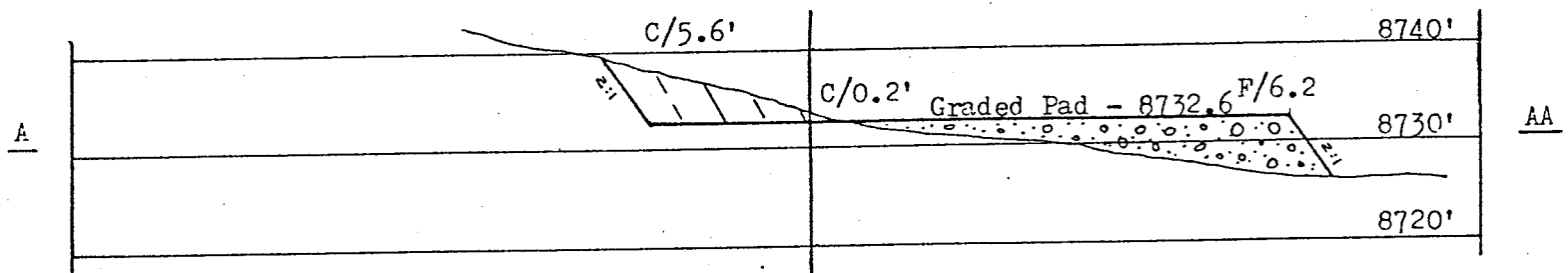
Prepared by: Ken Litus

Date: March 27, 1987

Sun Exploration & Production Company

Flash Federal #1
900' FSL & 2600' FWL
Section 18, T3N, R15E
Summit Co., Utah

Cross Sections

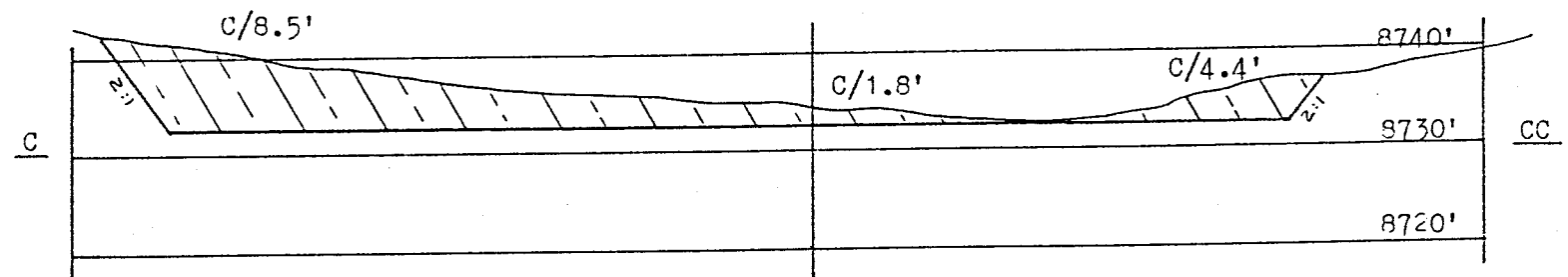
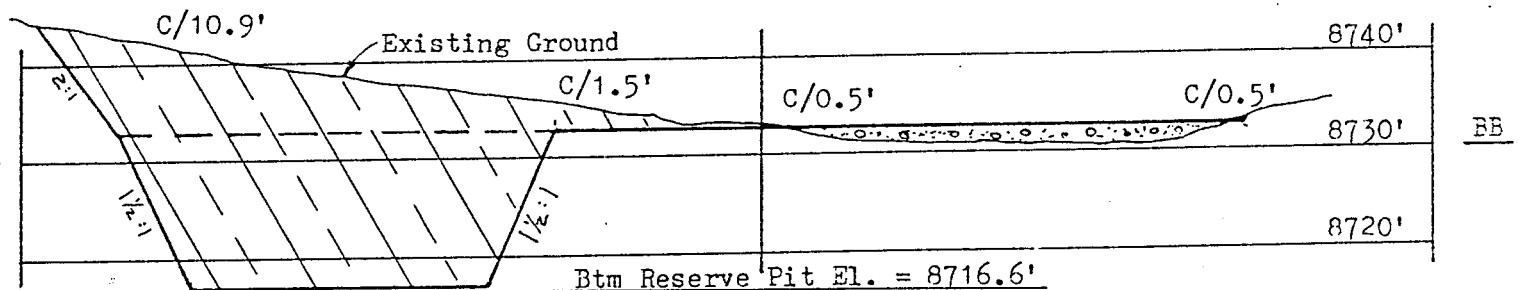


Quantities:

Topsoil - 2,800 cu. yds.
Cut - 13,800 cu. yds.
Fill - 4,200 cu. yds.
Pit - 13,900 cu. yds.

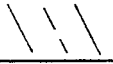

Note:

Cut & Fill quantities calculated
after topsoil removal.
Topsoil Depth = 0.5'.



Scale:

Vert. - 1"=20'
Horz. - 1"= 60'

Cut 
Fill 

Powers Elevation, Inc.

Prepared by: Ken Litus

Date: March 27, 1987

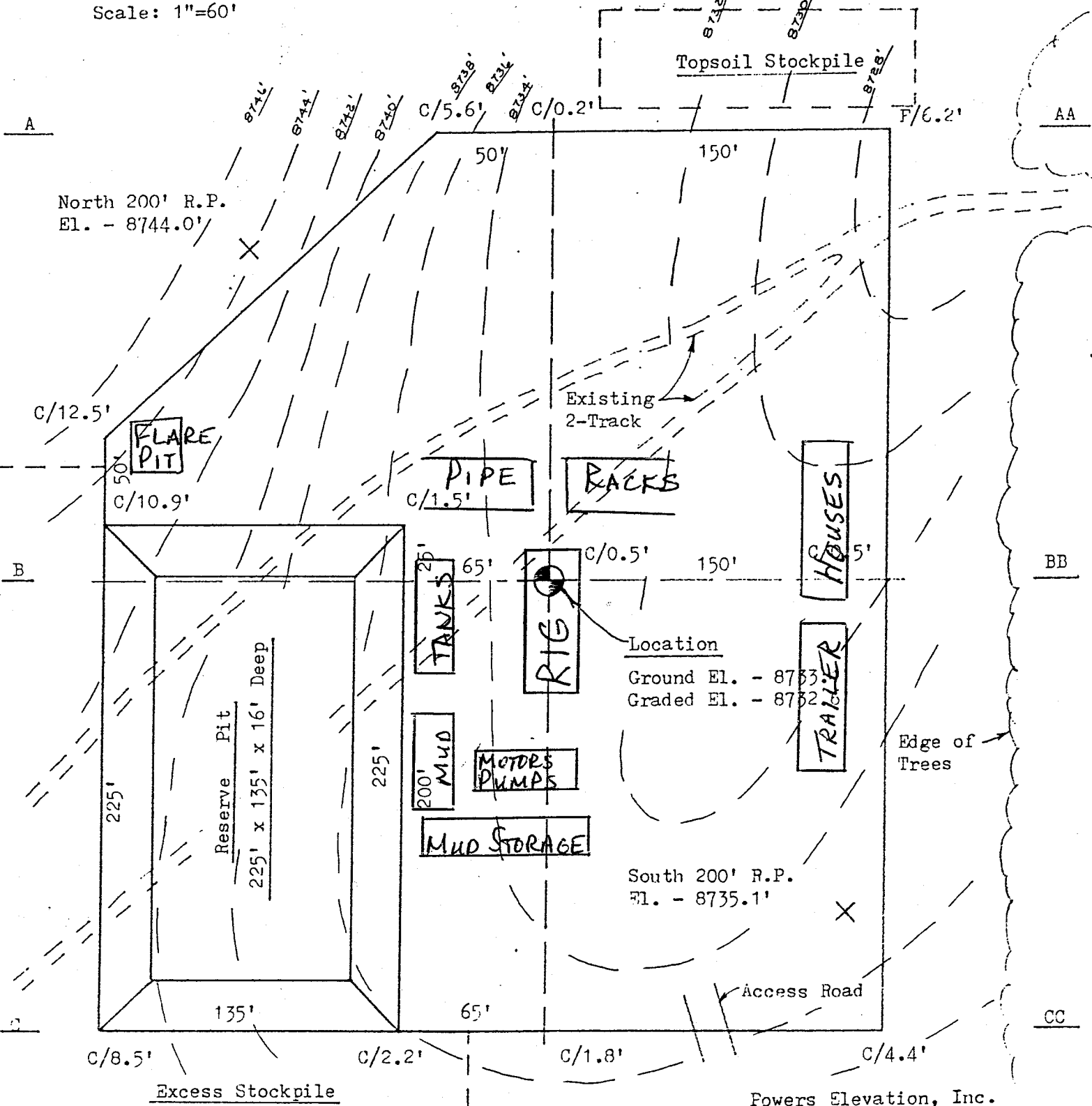
Sun Exploration & Production Company

Flash Federal #1
900' FSL & 2600' FWL
Section 18, T3N, R15E
Summit Co, Utah

Pad Layout

Scale: 1"=60'

DRAINAGE



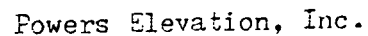
Powers Elevation, Inc.

Prepared by: Ken Litus

Date: March 27, 1987

Flash Federal #1
900' FSL & 2600' FWL
Section 18, T3N, R15E
Summit Co, Utah

Scale: 1"=60'



Prepared by: Ken Litus
Date: March 27, 1987

Scale
1"=2000'

To Lone tree
To Spring

UINTA CO
SUMMIT CO

UINTA CO
SUMMIT CO

Existing Improved Road

Proposed Access Road

Sun Exploration & Production Co.

Flash Federal #1

Sun Exploration & Production Co.

Flash Federal # 1
900' FSL & 2600' FWL
Section 18, T3N, R15E
Summit Co., Utah

EXHIBIT #10

North Dakota Commission Issues Orders

The North Dakota Industrial Commission redefined the boundaries of seven oil pools following its December 16 hearing.

The **Rosebud Madison** pool in Williams County, was redefined to include the following lands: s/2 34 and sw 35-154n-102w; and nw 2 and n/2 3-153n-102w. Spacing was set at 160 acres.

The **Patent Gate Madison** pool in McKenzie County was redefined to include all of 30 and s/2 19-151n-100w. Spacing was set at 160 acres.

The **Temple Duperow** pool in Williams County was redefined to include: all of 25 and 36, e/2 26 and all of 24-159n-96w; sw 30 and w/2 31-159n-95w; all of 6, 7 and 18, n/2 19, w/2 8 and w/2 17-158n-95w; and all of 1 and 12 and ne 13-158n-96w, with spacing set at 160 acres.

The **Blue Buttes Stonewall** pool in McKenzie County was redefined to include: s/2 31, s/2 32, s/2 33 and s/2 34-152n-95w; all of 3 through 10, 15 through 22 and 27 through 34-151n-95w; all of 13, 24, 25, 35 and 36-151n-96w; all of 3 through 11, 14 through 18 and 21 through 23-150n-95w; and all of 1, 2, 12 and 13-150n-96w. Spacing was set at 320 acres.

Bottineau County's **Mad Max Madison** pool was redefined to include e/2 21 and w/2 22-161n-81w, with spacing set at 40 acres.

The **Marquis Madison** pool in Billings County was redefined to include: all of 31 and 32 and sw 30-140n-101w (excepting that portion of the quarter section that lies within the boundaries of the Theodore Roosevelt National Park); all of 36 and s/2 25-140n-102w; and all of 5 and 6-139n-101w. Spacing was set at 160 acres.

Williams County's **Good Luck Duperow** pool was redefined to include se 7, sw 8, w/2 17 and e/2 18-157n-101w, with spacing set at 160 acres.

Applications for spacing for four other fields—**Crazy Man Creek Madison** pool, Williams County; **Bull Moose Duperow** pool, McKenzie County; **Tioga Silurian** pool, Williams County; and **Tandy Red River** pool, Williams County—were continued to upcoming hearings.

Galaxy Oil's request for an order authorizing the commingling in a common tank of oil produced at the 1 Kennedy "A" in sw 29-151n-96w, McKenzie County, with oil produced from other wells was approved.

An application by Amerada Hess seeking an order authorizing the underground injection of fluids into the Dakota formation at a well in sw sw 24-139n-102w, Medora field, Billings County, was approved.

Deep Dakota Test Staked Near Utah/Wyoming Line

43-043-3088
conf.

A 16,000-ft test of the lower Cretaceous Dakota sand has been scheduled by Sun Exploration & Production in eastern Summit County, Utah. The 1 Flash-Federal, in irregular section 18 (900 fsl, 2600 fwl)-3n-15e, just south of the Wyoming border, is a little more than a mile east-northeast of Utah's Bridger Lake field, a Dakota oil pool, and within two miles south of Dakota production in Wyoming's Luckey Ditch field.

The venture is about three quarters of a mile southeast of a Bridger Lake stepout completed by Phillips Petroleum in 1971 in ne se 13-3n-14e as a 15,500-ft dry hole. That well was cased with seven-inch liner to 15,487 ft, but tests in Dakota and Mowry proved to be non-commercial. Log tops, measured from a kelly bushing elevation of 8751 ft, include Frontier at 14,686 ft, Mowry 14,802 and Dakota at 15,110 ft.

One and a half miles north of the new location, in Uinta County, Wyoming, Sun recently completed the 4 Luckey Ditch-Federal-B, nw ne 19-12n-114w, on the west side of Luckey Ditch field, flowing 1,085 bbls of 42° oil, 1,076,000 cu ft of gas and 99 bbls of water per day from Dakota between 15,714 and 15,748 ft (PI 12-16-86).

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Rocky Mountain Region Report (USPS 113-170). Price: \$1296 per year. "Northern Edition" Price: \$1080 per year. "Wyoming Edition" Price \$1080 per year. "Four Corners-Intermountain Edition" Price \$792 per year. "Southeastern Edition" Price \$732 per year. "Newsletter Edition" Price \$732 per year. Published by Petroleum Information Corporation, Monday through Friday except New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and the day after, and Christmas Day and the day after, 4100 East Dry Creek Road, Littleton, CO 80122. Second class postage paid at Littleton, CO 80122 and additional mailing offices. Postmaster: Send address changes to: Rocky Mountain Region Report, P.O. Box 2612, Denver, CO 80201.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
SALT LAKE DISTRICT OFFICE
2370 South 2300 West
Salt Lake City, Utah 84119

3160
OG 8701
U-27918
(U-026)

RECEIVED**AUG 11 1987****DIVISION OF OIL
GAS & MINING**

August 4, 1987

Dianne R. Nielson
State of Utah
Department of Natural Resources
Division of Oil, Gas, and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah, 84180-1203

Dear Dianne:

Enclosed is a copy of the approved APD fact sheet and the location plat for Sun Exploration and Production Company's, Flash Federal No. 1, NE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 18, T. 3 N., R. 15 E., Summit County, Utah. If you have any questions concerning this matter, please feel free to contact Dan Washington of my staff.

Sincerely,

Deane H. Zeller
Deane H. Zeller
District Manager

CONFIDENTIAL
O.G.M.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL ☒ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL
OIL WELL ☒ GAS WELL ☒ OTHER ☐ SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. NAME OF OPERATOR

SUN EXPLORATION & PRODUCTION COMPANY

3. ADDRESS OF OPERATOR

P.O. BOX 5940 T.A., DENVER, COLORADO 80217

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface

900' FSL & 2600' FWL NESW SECTION 18
At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

8 MILES W/SW OF LONETREE WYOMING

15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any) 1310

16. NO. OF ACRES IN LEASE
1793.7

17. NO. OF ACRES ASSIGNED
TO THIS WELL
640

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. 5200

19. PROPOSED DEPTH
16,000

20. ROTARY OR CABLE TOOLS
ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

8733 GR

22. APPROX. DATE WORK WILL START
JULY 1, 1987

5. LEASE DESIGNATION AND SERIAL
U-27918
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
NA
7. UNIT AGREEMENT NAME
NA
8. FARM OR LEASE NAME
FLASH FEDERAL
9. WELL NO.
1
10. FIELD AND POOL, OR WILDCAT
WILDCAT
11. SEC., T., R. M., OR BLK.
AND SURVEY OR AREA
SEC 18 T3N R15E
12. COUNTY OR PARISH
SUMMIT
13. STATE
UTAH

CONFIDENTIAL
O.G.M.

RECEIVED

AUG 11 1987

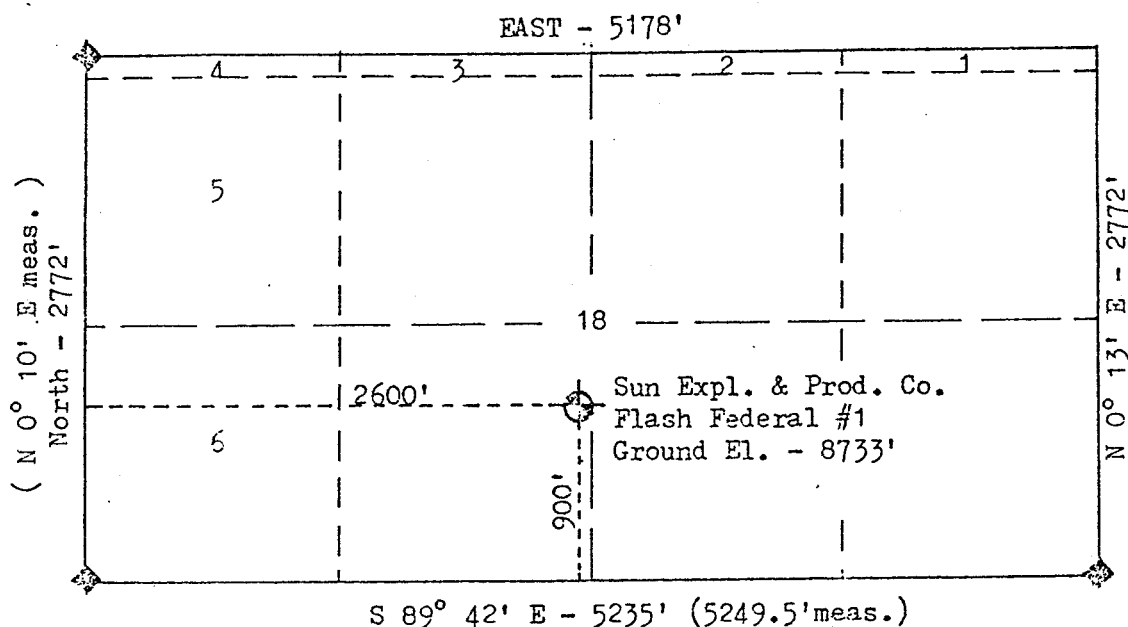
DIVISION OF OIL
GAS & MINING

24. SIGNED Steve Stearns TITLE DISTRICT DRILLING ENGINEER DATE 5-14-87
(This space for Federal or State office use)
PERMIT NO. 086 8701, 13-043-30082 APPROVAL DATE 4 AUG 1987
APPROVED BY Deane H. Zeller TITLE Dist. Mgr. DATE Aug. 4, 1987
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side



N

T.
3
N.

NOTES:

CONFIDENTIAL**O.G.M.**

1. Basis of Bearing is S 89° 42' E on the south line of Section 18.
2. Bearings and distances are GLO plat dimensions unless otherwise noted.
3. Indicates IPBC found.

Scale: 1"=1000'

Powers Elevation of Denver, Colorado has in accordance with a request from Dale Fessler for Sun Exploration & Production Company determined the location of Flash Federal #1 to be 900' FSL & 2600' FWL Section 18 , Township 3 North Range 15 East of the Salt Lake Base and Meridian, Summit County, Utah.

I hereby certify that this plat is an accurate representation of a correct survey showing the location of Flash Federal #1.

Date: October 27, 1986

J. Nelson
Licensed Land Surveyor No. 2711
State

090104

CONFIDENTIAL

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

API #43-043-30282

NAME OF COMPANY: SUN EXPLORATION & PRODUCTION COMPANY

WELL NAME: FLASH FEDERAL #1

SECTION SE SW 18 TOWNSHIP 3N RANGE 15E COUNTY SUMMIT

DRILLING CONTRACTOR SULLIVAN

RIG #

SPUDDED: DATE 8-13-87

TIME

How Rat Hole Digger

DRILLING WILL COMMENCE Approx. 8/31/87 - Grace #269

REPORTED BY Cindy Bush

TELEPHONE # (303) 696-3531

DATE 8-28-87 SIGNED AS

STATE ENGINEER'S ENDORSEMENT

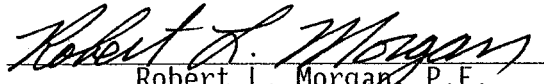
WATER RIGHT NUMBER: 41-3391

APPLICATION NO. T62764

1. August 18, 1987 Application received.
 2. August 19, 1987 Application designated for APPROVAL by JW and SG.
 3. Comments:
-
-

Conditions:

This application is hereby APPROVED, dated August 26, 1987, subject to prior rights and this application will expire on August 26, 1988.


Robert L. Morgan, P.E.
State Engineer

STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U-27918	
2. NAME OF OPERATOR Sun Exploration and Production Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME 090112	
3. ADDRESS OF OPERATOR PO Box 5940 T.A. Denver, CO 80217		7. UNIT AGREEMENT NAME Flash Federal	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 900' FSL & 2600 FWL NESW Sec 18		8. WELL NO. 1	
14. PERMIT NO. 43-043-30082		15. ELEVATIONS (Show whether DF, RT, GR, etc.) 8733 GR	
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data		10. FIELD AND POOL, OR WILDCAT Wildcat	
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)* This well was dry hole <u>spud</u> on 8/13/87 by Sullivan Rat Hole Company		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec 18-T3N-R15E	
12. COUNTY OR PARISH Summit		13. STATE Utah	

Duly

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data			
NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	
(Other) <u>Spud</u>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

RECEIVED
AUG 31 1987
 DIVISION OF OIL
 GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED *Delia L. Rott* TITLE Sr. Prod Acct DATE 8/28/87

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
 CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☒ GAS WELL ☐ OTHER ☐
2. NAME OF OPERATOR
Sun Exploration and Production Company
3. ADDRESS OF OPERATOR
PO Box 5940 T.A. Denver, CO 80217
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also space 17 below.)
At surface
900 FSL & 2600 FWL NESW Sec 18

5. LEASE DESIGNATION AND SERIAL NO.

U- 27918

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

0925260

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Flash Federal

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

Sec 18-T3N-R15E

12. COUNTY OR PARISH 13. STATE

Summit

UTAH

14. PERMIT NO. 15. ELEVATIONS (Show whether DF, RT, GR, etc.)
29737 43.043 3008 733 GR

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other) Spud date & surf csg

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(Note: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Spud surface hole 8/31/87

Ran 117 jts 9-5/8" 40# K-55 LT&C csg/CS @ 5007/FC @ 4923/DV @ 2021/cmt'd 1st stage w/700
sx lite w/3% CACL & 1/4#/sx flocele/tailed w/300 sx class G w/1/4#/sx flocele/did not bump
plug/open DV & circ 4 hys w/no cement to surf/cmt 2nd stage w/1200 sc lite w/3% CACL &
1/4#/sx flocele/tailed w/200 sx class A w/1% CSCL & 1/4#/sx flocele/circ 80 sx excess cmt to
surf/had good returns entire job/FP 800# close DV w/1200#/float held/

18. I hereby certify that the foregoing is true and correct

SIGNED

TITLE Sr. Prod Acct

DATE 9-15-87

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

DOUBLE JACK TESTING & SERVICES, INC.

100727

B.O.P. Test Report

B.O.P. Test Performed on (date) September 13, 1987

Oil Company Sun Exploration & Production

Well Name & Number Flash Federal #1

Section 18

43.043.30080

Township 3N

Range 15E

County Summit, Utah

Drilling Contractor Grace #269

Oil Company Site Representative Lyle

Rig Tool Pusher _____

Tested out of Evanston, Wyoming

Notified Prior to Test _____

Copies of This Test Report Sent to: Site Representative

Utah Oil & Gas

B.L.M.

Original Chart & Test Report on File at: Double Jack Evanston office

Tested by: Double Jack Testing & Services, Inc.
108 Parkview Road
P.O. Box 2097
Evanston, Wyoming 82930

RECEIVED

OCT 5 1987

DIVISION OF OIL
GAS & MINING

Double Jack Testing & Services Inc.

P.O. Box 2097

Evanston, Wyoming 82930

(307) 789-9213

FIELD
TICKET

5022

DATE

7-13-87

OPERATOR

Summit

COUNTY

STATE

Utah

SECTION

19

RIG NAME AND #

Grace 269

WELL NAME AND NO.

Flash Feed # 2

TOWNSHIP

3-N

RANGE

15E

EQUIPMENT TESTED

rams	RAMS	5000 psi	15 mins
rams	RAMS	5000	15 mins
rams	RAMS	5000	15 mins
annular	ANNULAR		
b.o.p.	B.O.P.	2500	15 mins
choke	CHOKE		
4"	LINE	5000	15 mins
3"	KILL		
	LINE	5000	15 mins
	UPPER		
	KELLY	5000	15 mins
	LOWER		
	KELLY	5000	15 mins
	SAFETY		
	VALVES	5000	15 mins

ADDITIONAL TESTS & COMMENTS

test Swage super choke 5000 psi 15 mins

test 4" Km wall head 1800 psi 15 mins

Discovered water from choke line + manifold. flushed +
filled with methanol.

CLOSING UNIT PSI 2900

CLOSING TIME OF RAMS 2 secs

HYDRIL 125ccs

CLOSED CASING HEAD VALVE yes

SET WEAR RING yes

RECEIVED

OCT 5 1987

WYOMING OIL
FIELD

COMPANY		LEASE AND WELL NAME #	DATE OF TEST	RIG # AND NAME
Swar		Flash FCR #2	9-13-87	Grave 287
TEST #	TIME			
	4:00pm to 12:00am	ripple up		
1	5:00-5:15	test well head to 1800 psi.		
2	1:00-1:15	test inside 4 manuals on manifold against back side of manual on choke line		
3	1:16-1:31	test second set of manuals on choke manifold		
4		pressured up on manual chokes bled off in 2 mins did not hold a positive seal		
		no test Super super would not hold a positive seal		
5	2:00-2:15	test outside 5 manuals on choke manifold		
6	2:30-2:45	test TIV valve		
7	2:50-3:05	test Lower Kelly		
8	3:20-3:35 AM	test Upper Kelly		
		worked rams cannot get Blinds + pipes (top pipes) to close. worked several times, changed lines with lower pipe rams		
9		no test sweep Super choke (worked near plates)		
10	9:00-9:05	no test Lower pipe rams, worked rams but ex high pass.		
11	9:10-9:25	test Lower pipe rams, dart valve		
12	9:30-9:45	test top pipe rams, outside 2 manuals on Kill line inside manuals on choke line, dart valve		
13	9:50-10:05	test top pipes, inside manuals on Kill line, HCB valve on choke line		
14	10:10-10:25	test top pipe rams, check valve on Kill line, vertical riser, sweep Super choke, inside 3 manuals on manifold		
	10:30	worked Hydriil + increase psi (Hydriil was leaking)		
15		test Hydriil, dart, check valve, HCB on choke line		
16		re test Hydriil		
17		test Blind rams, manual on Kill line outside manuals on manifold		

H₂O & oil

#15, 16

OCT 5 1987

DIVISION OF OIL
GAS & MINING

pipes

#12, 13, 14

Swocu #14

blinds

#17

#12

check

#12

#14

#13

#12

#14

#13

#13

#2

#3

#4

#5

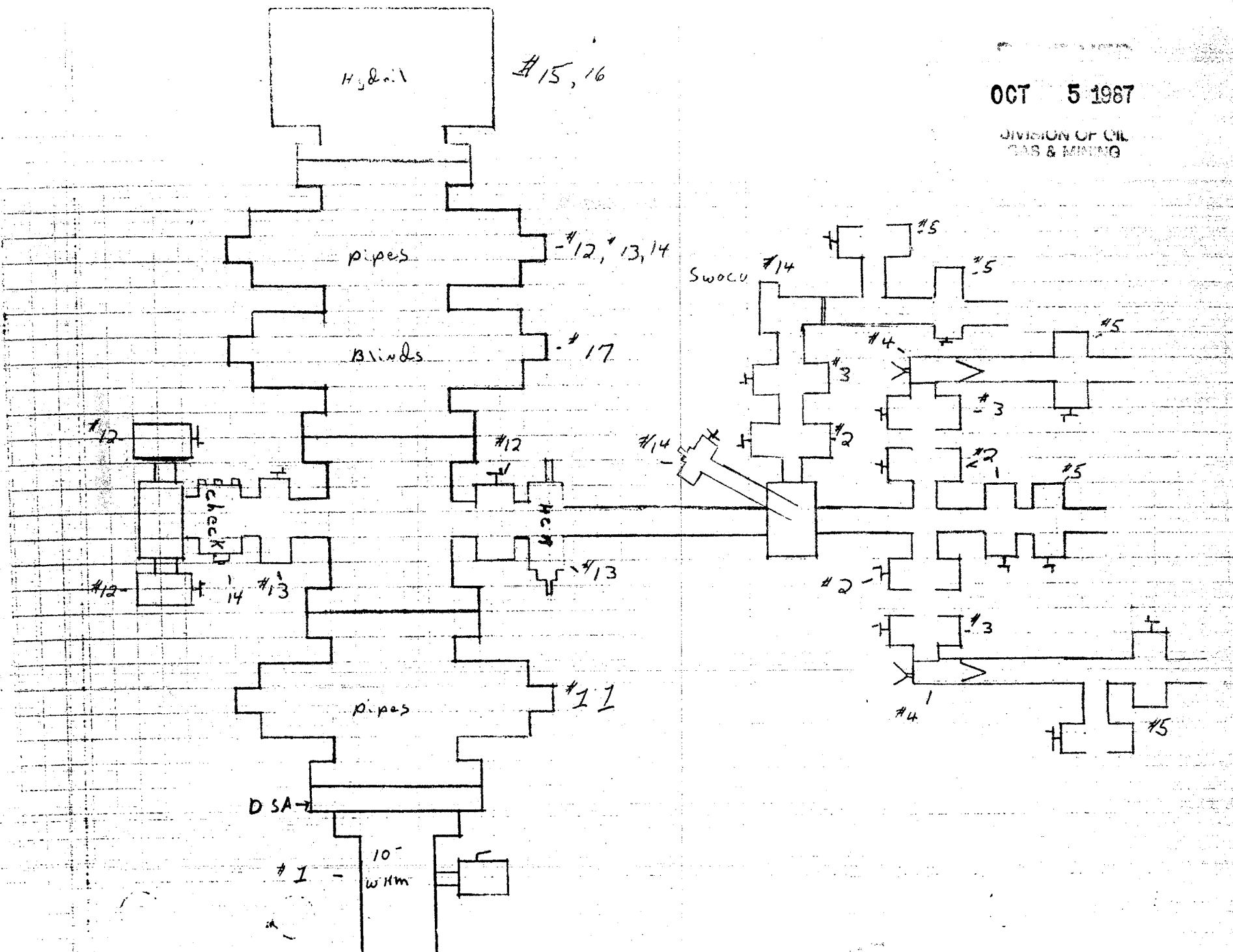
pipes

#11

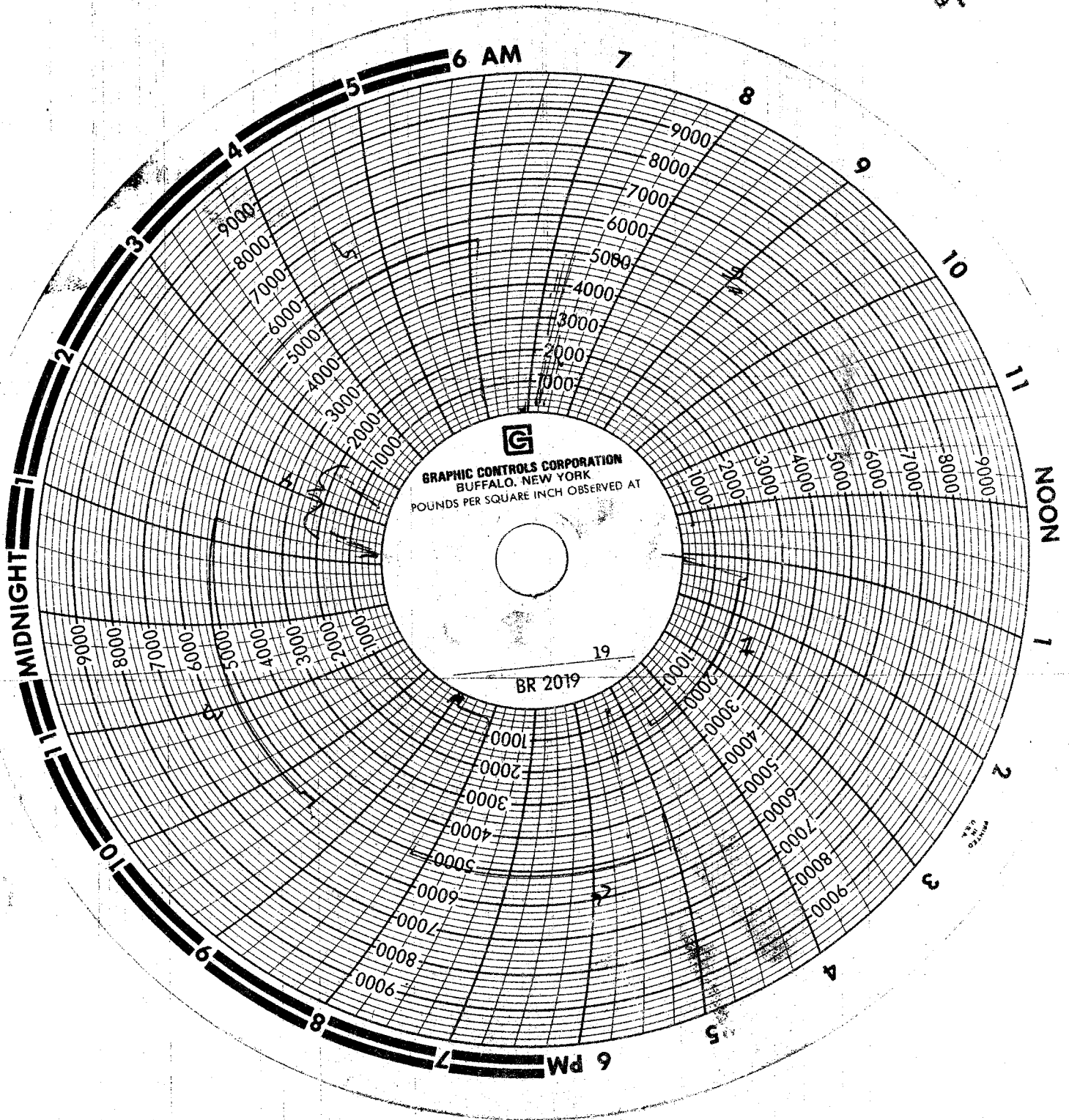
DSA

#1

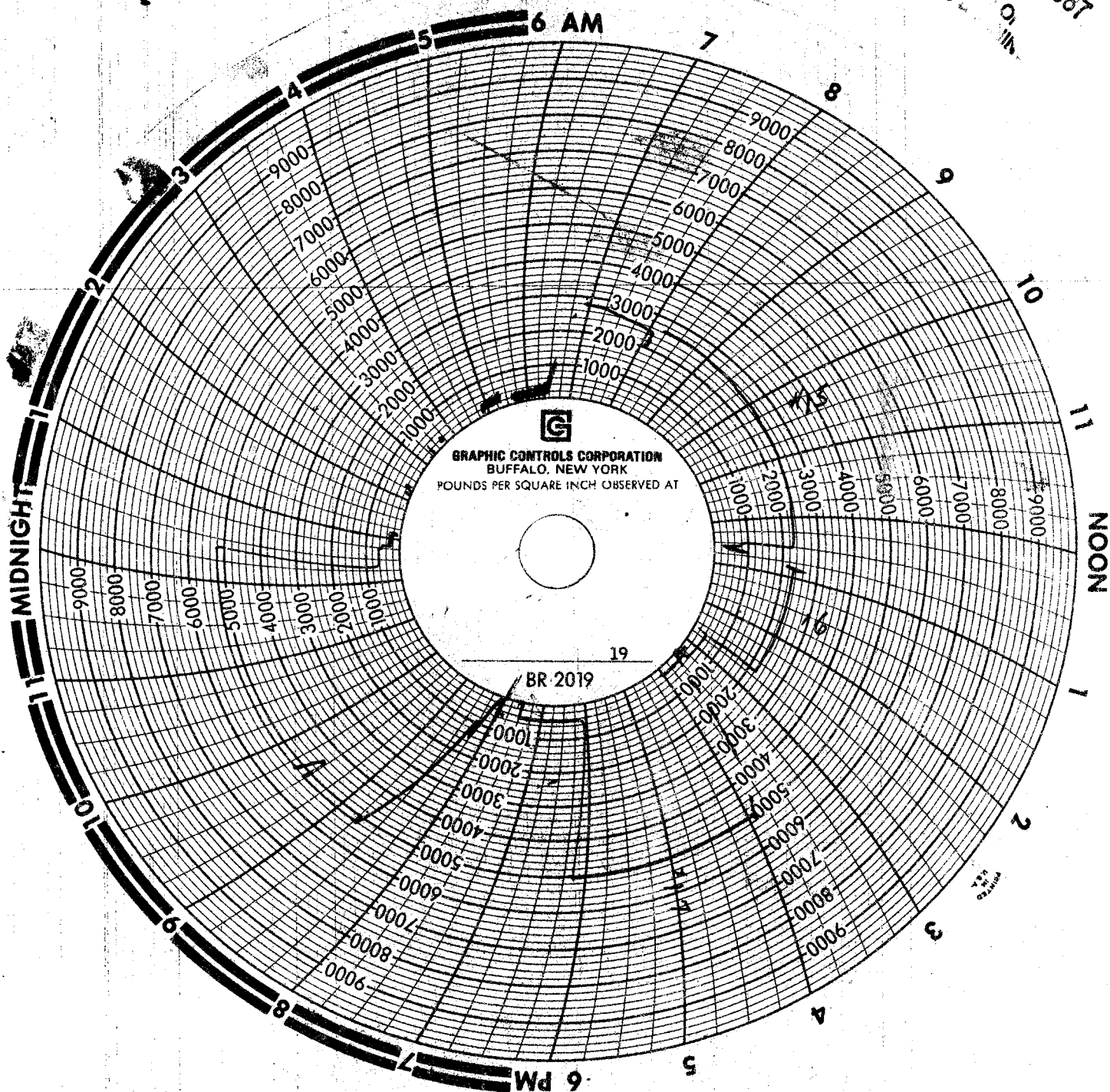
10" WHM



REC-1
OCT 3 1987
DIVISION OF CIVIL ENGINEERING



OCT 5 1987
DIV. GAS



101534



State of Utah
355 W. North Temple
3 Triad Center
Suite 350
Salt Lake City, UT 84180

CONFIDENTIAL
O.G.M.

**Sun Exploration and
Production Company**
PO Box 5940
Terminal Annex
Denver CO 80217-5940
303 696 3500

RE: Flash Federal #1
Sec. 18-3N-15N
Summit County, Ut

Please keep the above referenced well in confidential status.

We appreciate your co-operation in this matter. If you do have any questions, please do not hesitate to call us at 303/696-3531.

Sincerely,

SUN EXPLORATION AND PRODUCTION COMPANY

Cindy Bush
Pror. and Prod. Acct. Super.

CONFIDENTIAL
O.G.M.

DIVISION OF
OIL, GAS & MINING

RECEIVED
OCT 13 1987

CONFIDENTIAL

FILING FOR WATER IN THE STATE OF UTAH

APPLICATION TO APPROPRIATE WATER

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah.

22311

Rec. by QPS

Fee Paid \$ 20.00

Platted _____

Microfilmed _____

Roll # _____

Outg
43.043.30080
090209

TEMPORARY

WATER USER CLAIM NO. 41 - 3391

APPLICATION NO. T62764

1. PRIORITY OF RIGHT: August 18, 1987

FILING DATE: August 18, 1987

2. OWNER INFORMATION

Name: Diamond Square

Interest: 100 %

Address: 7105 Highland Drive, Salt Lake City, UT 84121

The land is owned by the applicant(s).

3. QUANTITY OF WATER: 5.0 acre feet (Ac. Ft.)

4. SOURCE: Henrys Fork DRAINAGE: Green River

POINT(S) OF DIVERSION:

COUNTY: Summit

(1) S. 1300 feet, E. 800 feet, from the NW Corner of Section 18,

Township 3 N, Range 15 E, SLB&M

Source: Henry's Fork

Description of Diverting Works: Pump & Alum. Pipe to well site

(2) S. 1100 feet, E. 900 feet, from the NW Corner of Section 18,

Township 3 N, Range 15 E, SLB&M

Description of Diverting Works: Pump & Alum. Pipe to well site

COMMON DESCRIPTION: 8 Miles South of Lonetree

5. NATURE AND PERIOD OF USE

Other Use: From August 18 to August 18.

6. PURPOSE AND EXTENT OF USE

Other Use: Drilling for exploration gas & Oil

One exploration well to be drilled at one of the 40's located above.

Land is

leased from the BLM.

7. PLACE OF USE

The water is used in all or parts of each of the following legal subdivisions.

TOWN	RANGE	SEC	North East Quarter				North West Quarter				South West Quarter				South East Quarter			
			NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$	NE $\frac{1}{4}$	NW $\frac{1}{4}$	SW $\frac{1}{4}$	SE $\frac{1}{4}$
3	N	15 E 18									X	X				X		

All locations in Salt Lake Base and Meridian

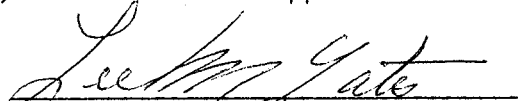
EXPLANATORY

Appropriate

The applicant hereby acknowledges he/they are a citizen(s) of the
United States or intends to become such a citizen.

The quantity of water sought to be appropriated is limited to that which
can be beneficially used for the purpose herein described.

The undersigned hereby acknowledges that even though he/they may have been assisted in
the preparation of the above-numbered application through the courtesy of the employees
of the Division of Water Rights, all responsibility for the accuracy of the information
contained therein, at the time of filing, rests with the applicant(s).



Signature of Applicant

DOUBLE JACK TESTING & SERVICES, INC.

Utah
111612

B.O.P. Test Report

B.O.P. Test Performed on (date) October 17, 1987

Oil Company Sun Exploration & Production

Well Name & Number Flash Federal #1 43043-30080

Section 18

Township 3N

Range 15E

County Summit, Utah

Drilling Contractor Grace #269

Oil Company Site Representative Lyle

Rig Tool Pusher _____

Tested out of Evanston, Wyoming

Notified Prior to Test _____

Copies of This Test Report Sent to: Site Representative

Utah Oil & Gas

B.L.M.

Original Chart & Test Report on File at: Double Jack office

Tested by: Double Jack Testing & Services, Inc.
108 Parkview Road
P.O. Box 2097
Evanston, Wyoming 82930

RECEIVED

NOV 12 1987

DIVISION OF OIL
GAS & MINING

Double Jack Testing & Services Inc.

P.O. Box 2097
Evanston, Wyoming 82930
(307) 789-9213

FIELD
TICKET 5499

DATE 10-17-87
OPERATOR Exploration & Production
COUNTY Summit STATE Utah

SECTION 18

RIG NAME AND # Grace # 269
WELL NAME AND NO. Flash Federal # 1
TOWNSHIP 3N RANGE 15 E

EQUIPMENT TESTED

Pipe	RAMS	5,000 Psi	15 min	OK
Blind	RAMS	5,000 Psi	15 min	OK
Pipe	RAMS	5,000 Psi	15 min	OK
	ANNULAR B.O.P.	2,500 Psi	15 min	OK
4"	CHOKES	5,000 Psi	15 min	OK
3"	KILL LINE	5,000 Psi	15 min	OK
	UPPER KELLY	5,000 Psi	15 min	OK
	LOWER KELLY	5,000 Psi	15 min	OK
Part. TIW	SAFETY VALVES	5,000 Psi	15 min	OK

ADDITIONAL TESTS & COMMENTS

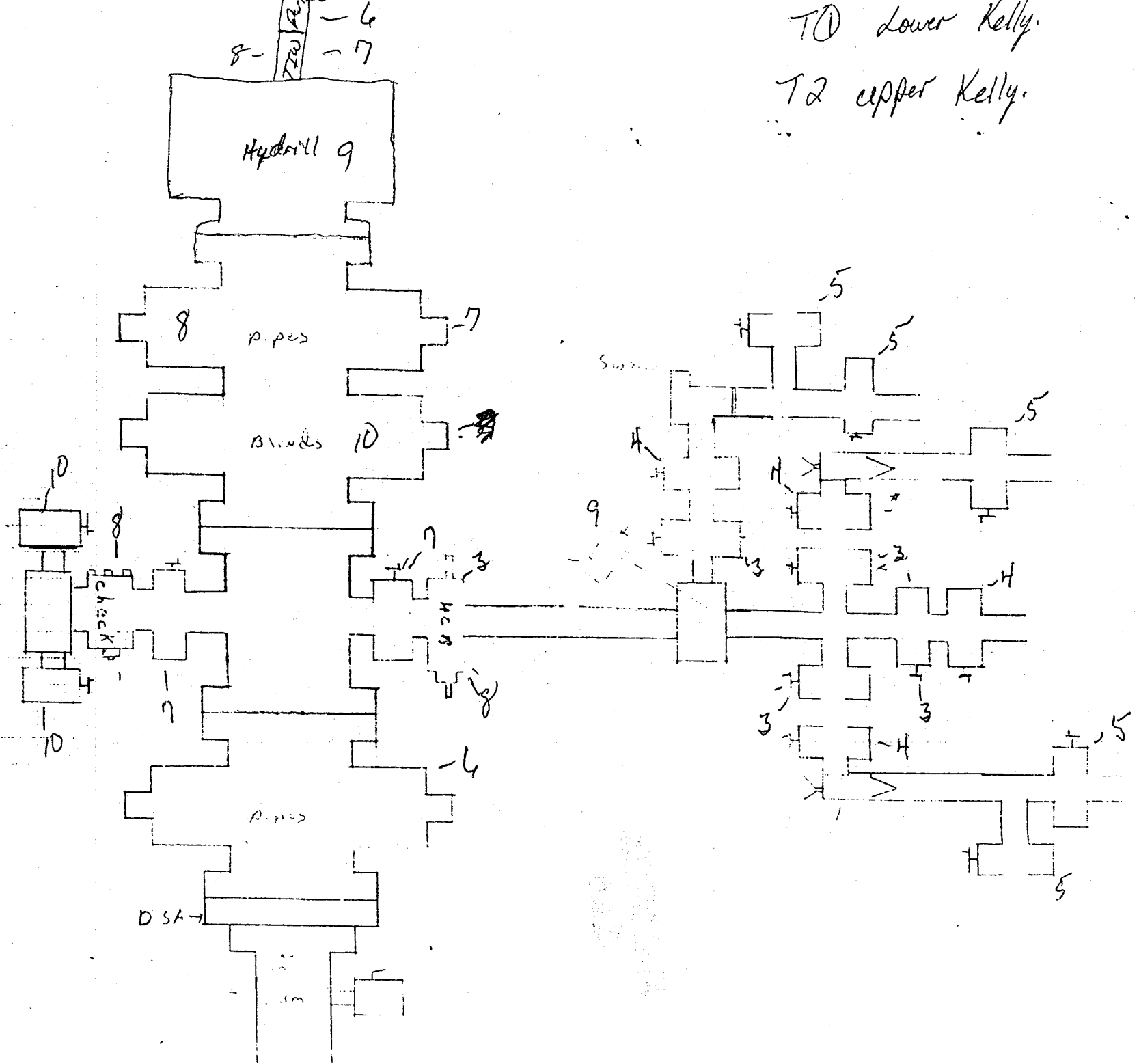
Test Swaco Super Choke No test
Manual Chokes No test

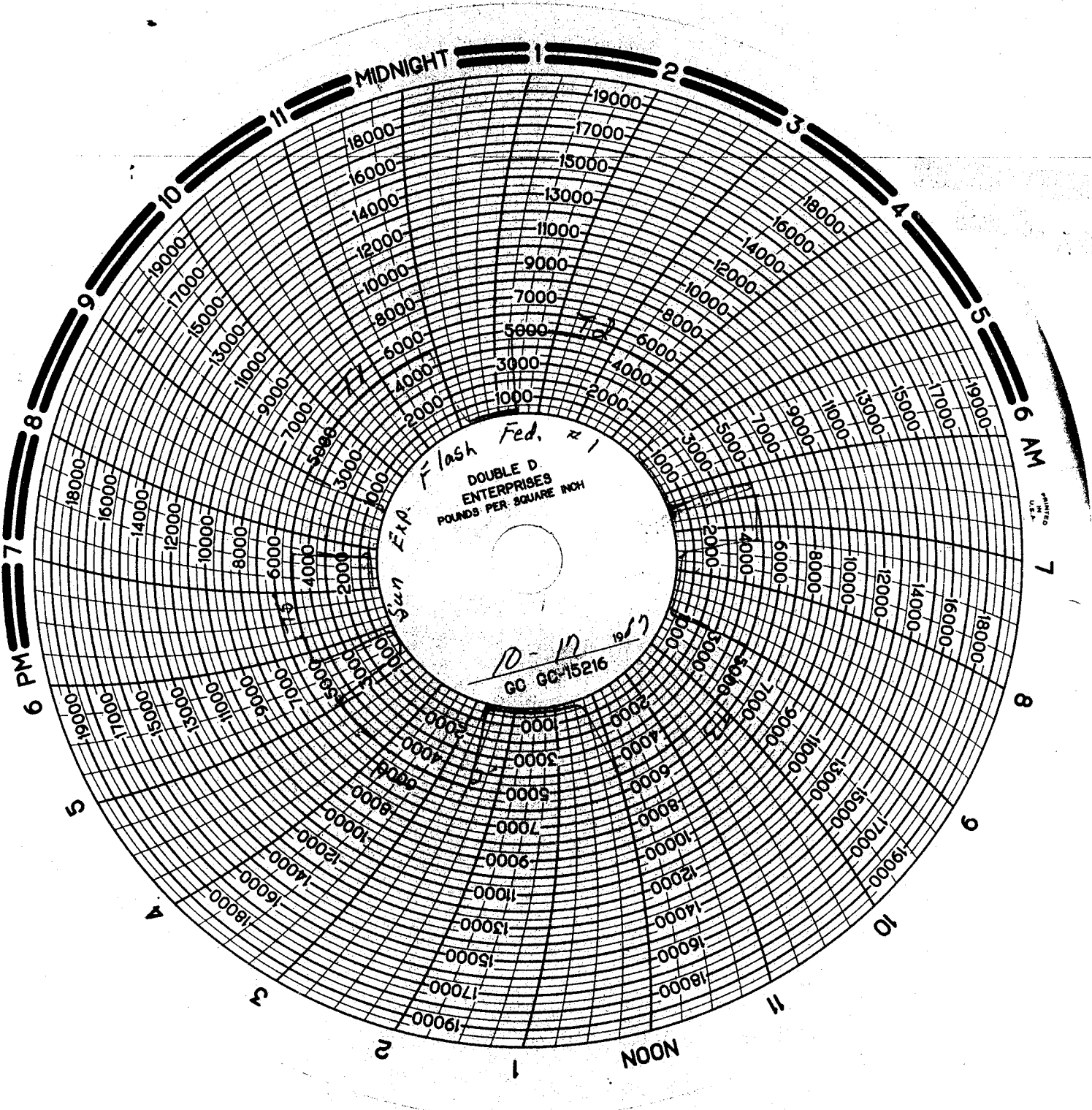
CLOSING UNIT PSI 2900 CLOSING TIME OF RAMS _____ HYDRIL _____
CLOSED CASING HEAD VALVE yes SET WEAR RING yes

RECEIVED
NOV 12 1987
DIVISION OF OIL
GAS & MINES

COMPANY		LEASE AND WELL NAME #	DATE	TEST	RIG # AND NAME
Sun Exploration & Production		Flash Federal # 1	10-17-87		Grace 269
EST#	TIME	Arrive on location @ 6:30 Rig up to test Kelley-			
1	7:02	Lower Kelley	5,000	For 15 min	OK
2	7:25	Upper Kelley	5,000	For 15 min	OK
3	8:08	Inside valves on manifold + HCR			OK
4	8:37	Valves Ahead of chokes + Second valve on Panix line			OK
5	8:55	Valves Down stream of chokes			
6	10:00	Bottom Pipes, Dart Valve,			OK
7	10:23	Top Pipes, inside Kill line + choke line, TIW			
8	10:53	Check Valve, HCR, TIW upper Pipes.			
9	11:23	Hydril, riser Valve, 2500	For 15 min		OK
10	12:00	Blinds Valves behind check valves.			OK

T1 Lower Kelly.
T2 upper Kelly.





MIDNIGHT

6 AM

PRINTED
IN
U.S.A.

7

8

9

10

11

NOON

1

2

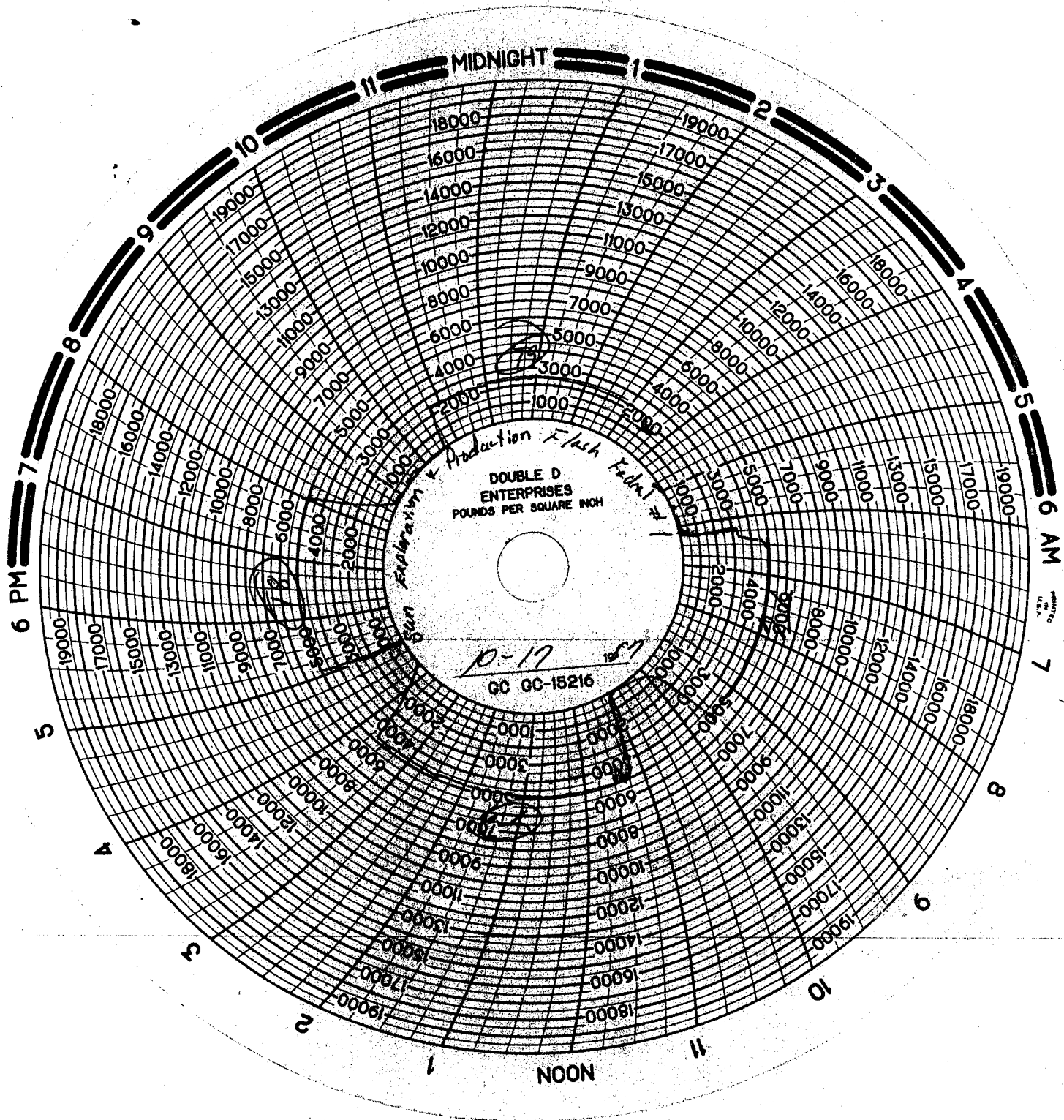
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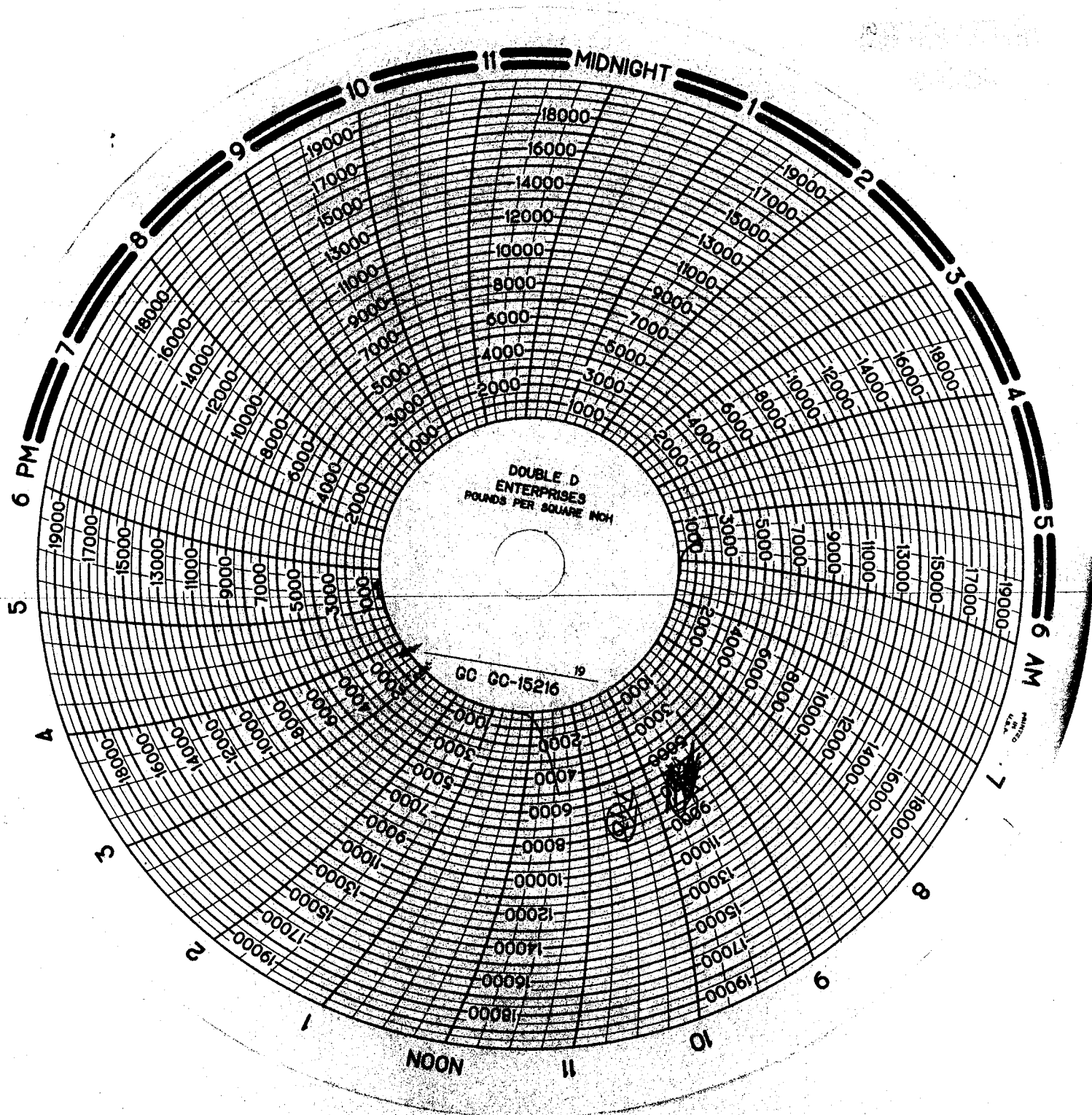
4

5

6 PM

Flash Fed. #1
DOUBLE D
ENTERPRISES
POUNDS PER SQUARE INCH
Sun Exp.
D-12
GC GC-15216





120802

RECEIVED
DEC 3 1987

DOUBLE JACK TESTING & SERVICES, INC.

B.O.P. Test Report

DIVISION OF
OIL, GAS & MINING

B.O.P. Test Performed on (date) November 16 1987

Oil Company Sun Exploration & Production

Well Name & Number Flash Federal #1

43-043-30282

Section 18

Township 3N

Range 15E

County Summit, Utah

Drilling Contractor Grace #269

Oil Company Site Representative Lyle

Rig Tool Pusher _____

Tested out of Evanston, Wyoming

Notified Prior to Test _____

Copies of This Test Report Sent to: Site Representative

Utah Oil & Gas

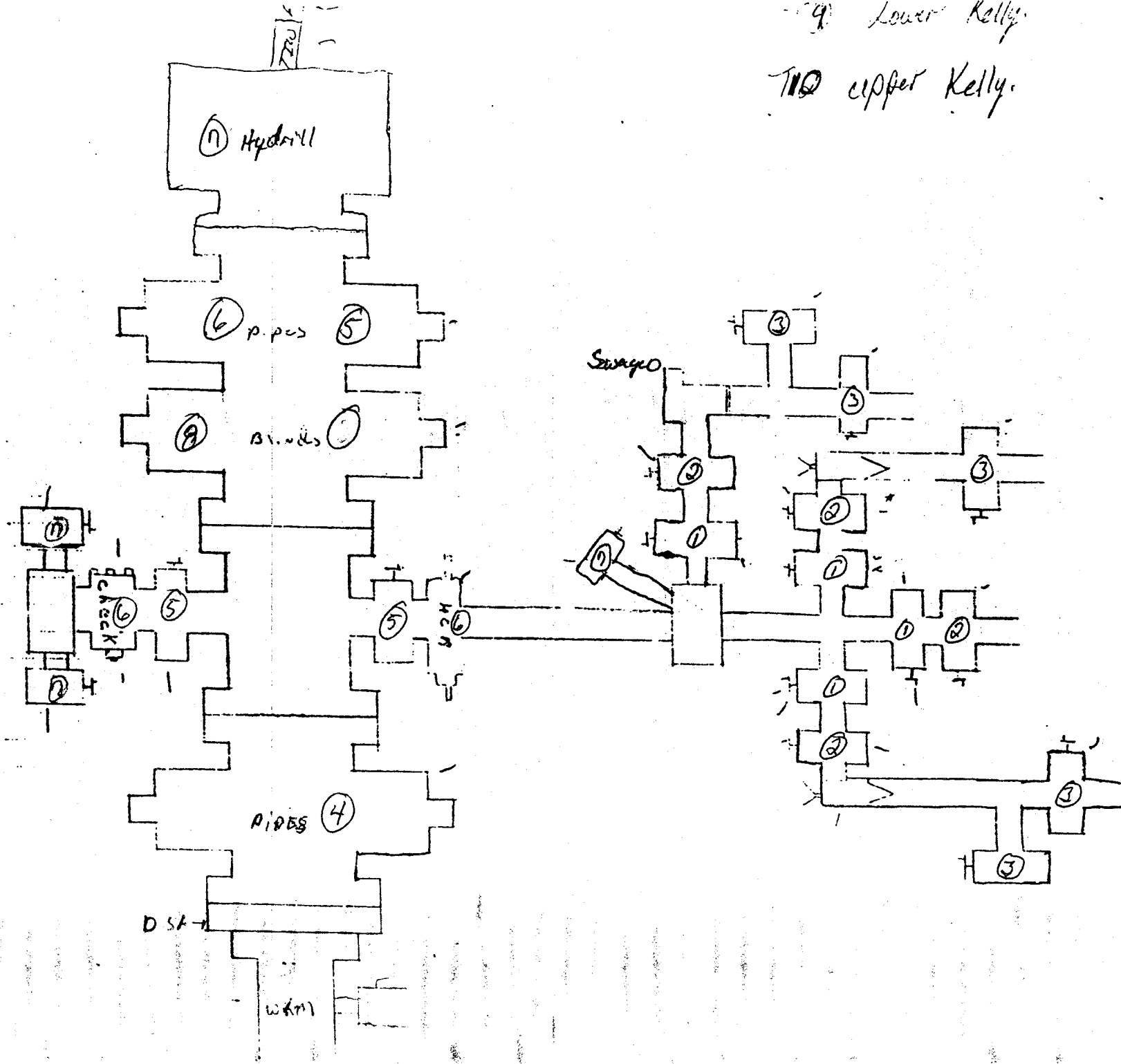
B.L.M.

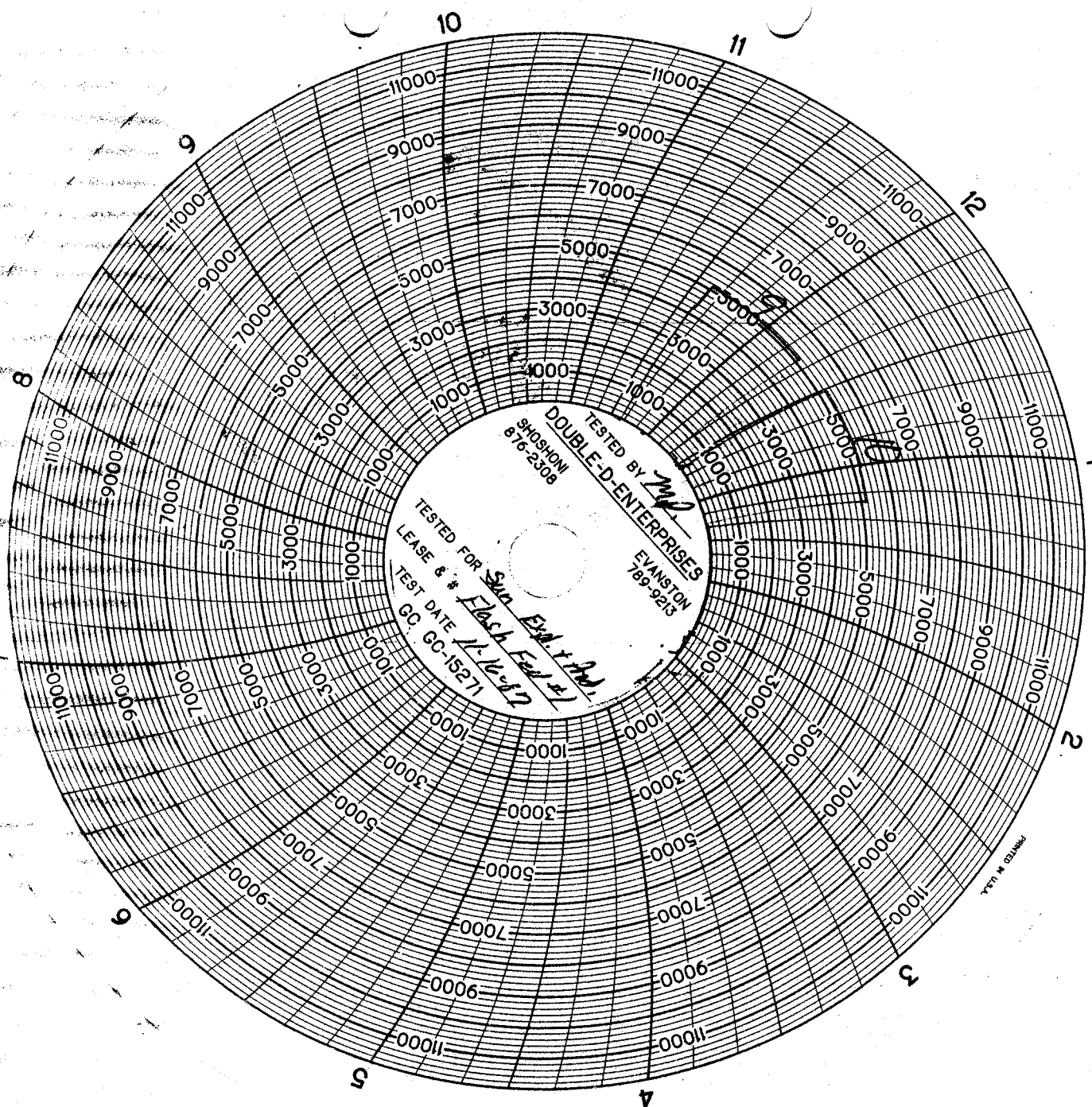
Original Chart & Test Report on File at: Double Jack office

Tested by: Double Jack Testing & Services, Inc.
108 Parkview Road
P.O. Box 2097
Evanston, Wyoming 82930

COMPANY		LEASE AND WELL NAME #	DATE OF TEST	RIG # AND NAME
Exploration		Flash Fed. #1	11-16-87	Grace 269
T#	TIME			
1	7:10	inside valves on manifold. 5000 psi for 15 min O.K.		
2	7:30	Second valves on manifold. 5000 psi for 15 min		
3	7:42	Valves behind manifold Chokes. Safety check on chokes. 5000 psi for 15 min OK.		
4	6:00	Bottom Pipe Rams & T.I.W. 5000 psi for 15 min		
5	6:20	Top Pipe Rams, inside Kill & Choke, Dart Valve. 5000 psi for 15 min		
6	6:40	Top Pipe Rams, Check Valve, H.C.R., Dart. 5000 psi for 15 min		
7	7:00	Hydrill, riser, valves behind check. 5000 psi for 15 min		
8	7:30	Blind Rams. 5000 psi for 15 min		
9	7:50	Lower Kelly. 5000 psi for 15 min		
10	8:10	Upper Kelly. 5000 psi for 15 min		

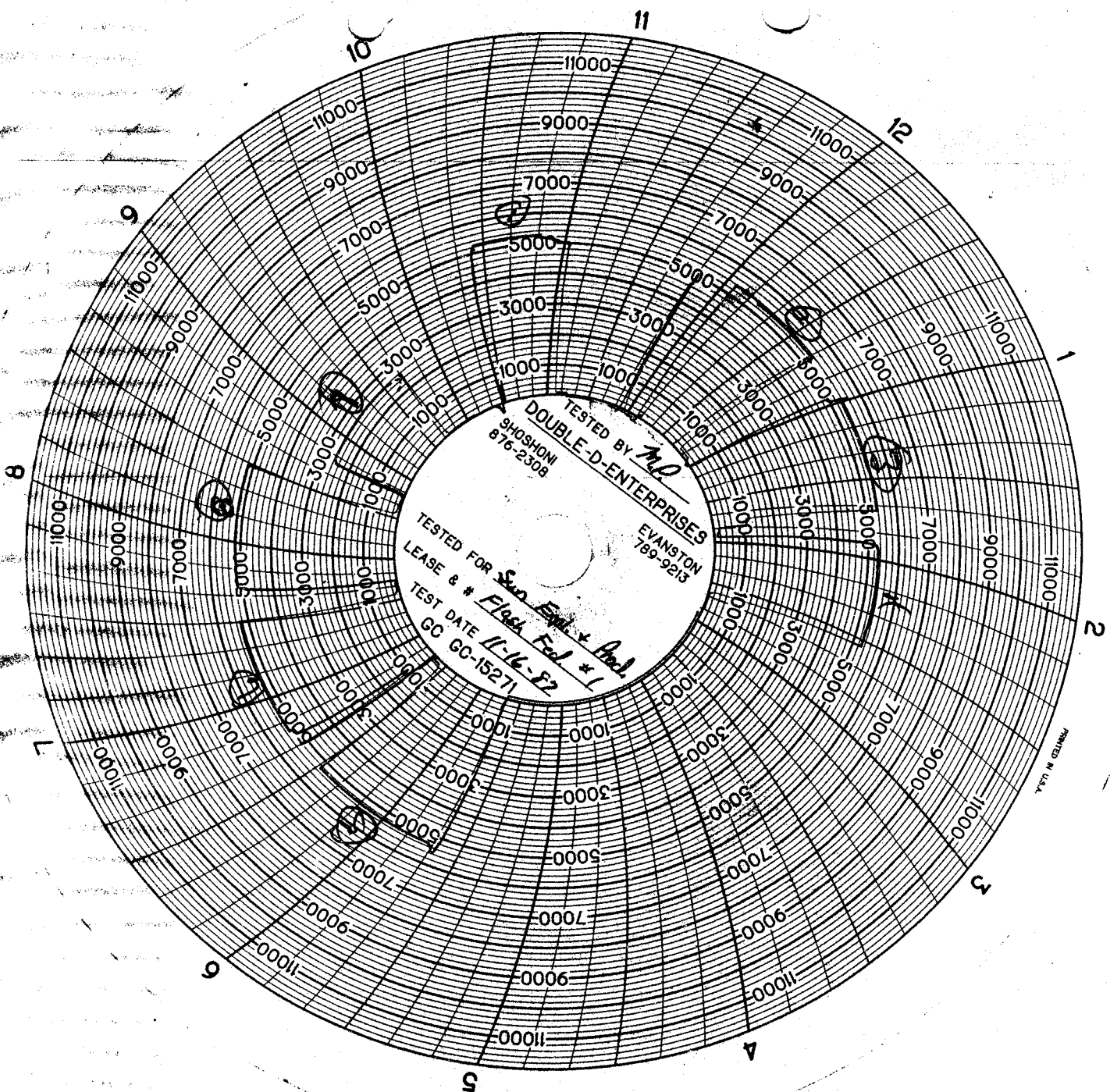
9 Lower Kelly.
 110 upper Kelly.





TESTED BY *ML*
DOUBLE-D-ENTERPRISES
EVANSTON
789-9213
SHOSHONI
876-2308
TESTED FOR *Sua Eya + M.L.*
LEASE # *Flash Field #1*
TEST DATE *11-16-42*
GC GC-15271

PRINTED IN U.S.A.



Double Jack Testing & Services Inc.

P.O. Box 2097
Evanston, Wyoming 82930
(307) 789-9213

FIELD
TICKET 5571

DATE

11-16-87

RIG NAME AND #

Grace 269

OPERATOR

San Exploration & Production

WELL NAME AND NO.

Flash Fed. #1

COUNTY

Summit

STATE

Utah

SECTION

18

TOWNSHIP

1N

RANGE

6E

EQUIPMENT TESTED

Pipe	RAMS	5,000	psi	For	15 min
Blind	RAMS	5,000	psi	For	15 min
Pipe	RAMS	5,000	psi	For	15 min
	ANNULAR				
	B.O.P.	2,500	psi	For	15 min
4"	CHOKER				
	LINE	5,000	psi	For	15 min
3"	KILL				
	LINE	5,000	psi	For	15 min
	UPPER				
	KELLY	5,000	psi	For	15 min
	LOWER				
	KELLY	5,000	psi	For	15 min
Q. + TIW	SAFETY				
	VALVES	5,000	psi	For	15 min

ADDITIONAL TESTS & COMMENTS

CLOSING UNIT PSI

CLOSING TIME OF RAMS 6 Sec.

HYDRIL 9 Sec.

CLOSED CASING HEAD VALVE

904

SET WEAR RING

404

STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U-27918 <i>Dr.</i>	
2. NAME OF OPERATOR Sun Exploration and Production Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME 122829	
3. ADDRESS OF OPERATOR P.O. Box 5940 T.A. Denver, Colorado 80217		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface NESW 900' FSL & 2600' FWL		8. FARM OR LEASE NAME Flash Federal	
14. PERMIT NO. 8701 43-043-30282		9. WELL NO. 1	
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 8733' Gr		10. FIELD AND POOL, OR WILDCAT Wildcat	
		11. SEC. T., R., M., OR BLK. AND SURVEY OR AREA Sec. 18-3N-15E	
		12. COUNTY OR PARISH Summit	13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐

FRACTURE TREAT ☐

SHOOT OR ACIDIZE ☐

REPAIR WELL ☐

(Other) ☐

PULL OR ALTER CASING ☐

MULTIPLE COMPLETE ☐

ABANDON* ☐

CHANGE PLANS ☒

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐

FRACTURE TREATMENT ☐

SHOOTING OR ACIDIZING ☐

(Other) ☐

REPAIRING WELL ☐

ALTERING CASING ☐

ABANDONMENT* ☐

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Sundry notice to confirm telephone conversation with Oil and Gas Commission and with Mickey Coulthard on 12-11-87 to plug this well back to approximately 12,200' and side track well to a new bottom hole location of 1980' FSL and 1980' FWL of Section 18. The lower Portion of the hole will be plugged as follows: (TD 15,600')

Formation	Top	Vol Cmt	Cmt Interval
Dakota	15069	100 sx	15100-14900
Frontier	14742	100 sx	14800-14600
Hilliard	12100	200 sx	12600-12200(Plug to kick off of.)

18. I hereby certify that the foregoing is true and correct

SIGNED *Cindy Bush*

TITLE Pror. & Prod. Acctg. Supvr.

DATE 12-14-87

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

ACCEPTED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

DATE: 12-18-87

BY: *John R. Baya*

Federal approval of this action
is required before commencing
operations.

*See Instructions on Reverse Side

020413

DOUBLE JACK TESTING & SERVICES, INC.

RECEIVED
JAN 26 1988

B.O.P. Test Report

DIVISION OF
OIL, GAS & MININGB.O.P. Test Performed on (date) 1-21-88 *Dr. l.* 43-043-30282Oil Company Sun Exploration & ProductionWell Name & Number Flash Fed. #1Section 18Township 3NRange 15ECounty SummitDrilling Contractor Grace 269Oil Company Site Representative Bill Oldson

Rig Tool Pusher _____

Tested out of Evanston OfficeNotified Prior to Test Utah B.L.M.Copies of This Test Report Sent to: Site RepresentativeUtah Oil & GasB.L.M.Original Chart & Test Report on File at: Double Jack Office EvanstonWyomingTested by: Double Jack Testing & Services, Inc.
108 Parkview Road
P.O. Box 2097
Evanston, Wyoming 82930

Doble Jack Testing & Services Inc.

FIELD TICKET 5858

P.O. Box 2097
Evanston, Wyoming 82930
(307) 789-9213

DATE

1-21-88

RIG NAME AND #

Grace 269

WELL NAME AND NO.

Flash Fed. # 1

OPERATOR

Summit Exploration & Production

COUNTY

Summit

STATE

Utah

SECTION

18

TOWNSHIP

3N

RANGE

15E

EQUIPMENT TESTED

Upper Rams 5000 psi for 15 min

Wells Rams 5000 psi 15 min

Annular Rams 5000 psi 15 min

B.O.P. 2000 psi 15 min

4" Choke Line 5000 psi 15 min

7" Kill Line 5000 psi 15 min

Upper Kelly 5000 psi 15 min

Lower Kelly 5000 psi 15 min

TIN Safety Valves 5000 psi 15 min

ADDITIONAL TESTS & COMMENTS

Arrive on location @ 11:00 AM

CLOSING UNIT PSI 2000

CLOSING TIME OF RAMS 4 Sec

HYDRIL 16 Sec

CLOSED CASING HEAD VALVE

yes

SET WEAR RING

yes

RATES

UNIT RATES 200.00 For first 8 hrs

ADDITIONAL 1 hr @ 50.00 per hr

MILEAGE 140 miles @ 1.00 per mile out of Evanston

TEST PLUG 10" WKM

TEST TOOL 4 Jay Slay (on location)

TOP SUB 4 1/2 IF

KELLY SUB 4 1/2 IF

OVER SUB 4 1/2 IF to 4 1/2 x Hole

RENTAL 20 gal @ 2.00 per gal

OTHER

TESTED BY

Marty Pennock

SIGNATURE

Dave Clark for Bill Arson

COMPANY REPRESENTATIVE

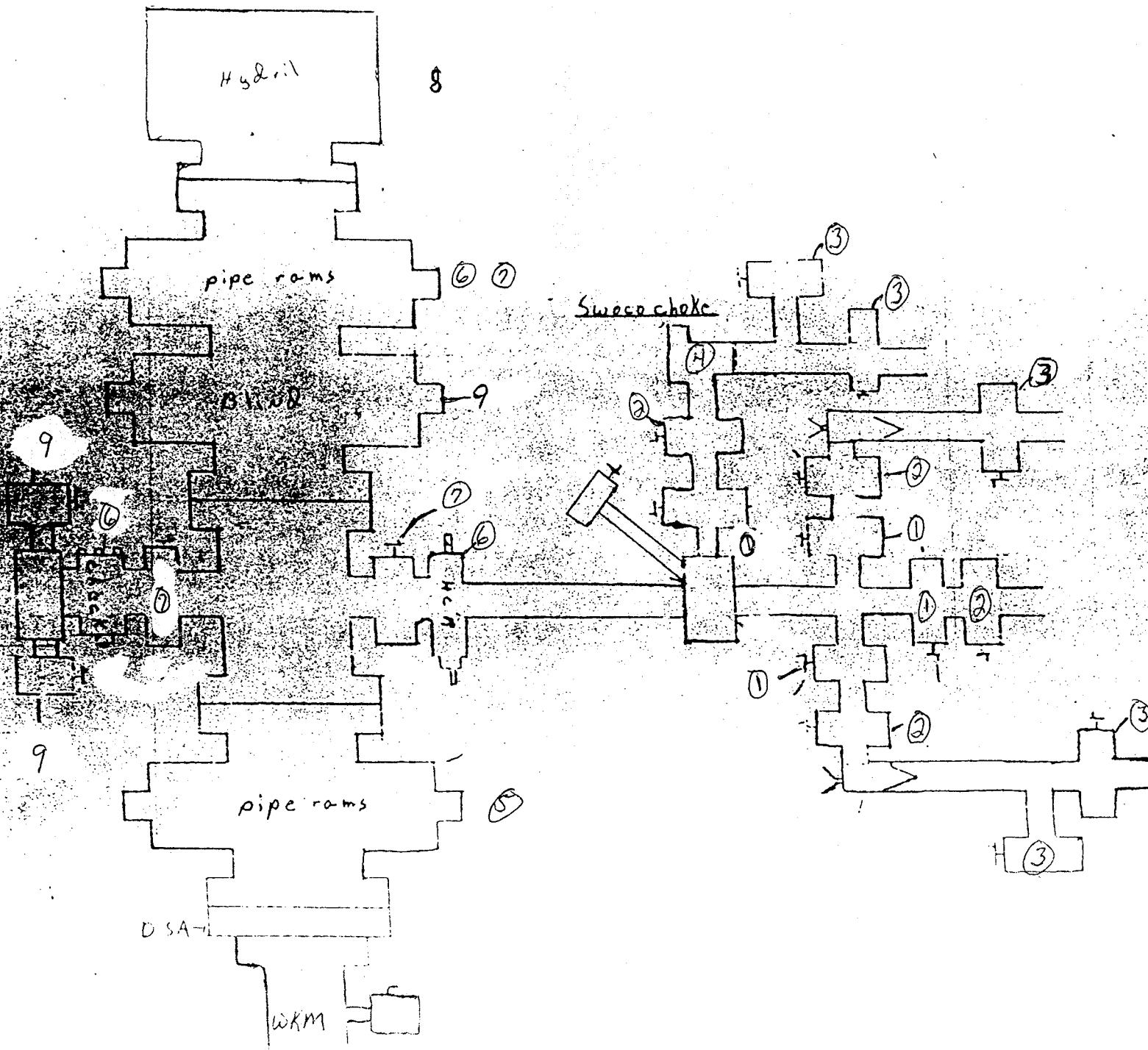
SUBTOTAL

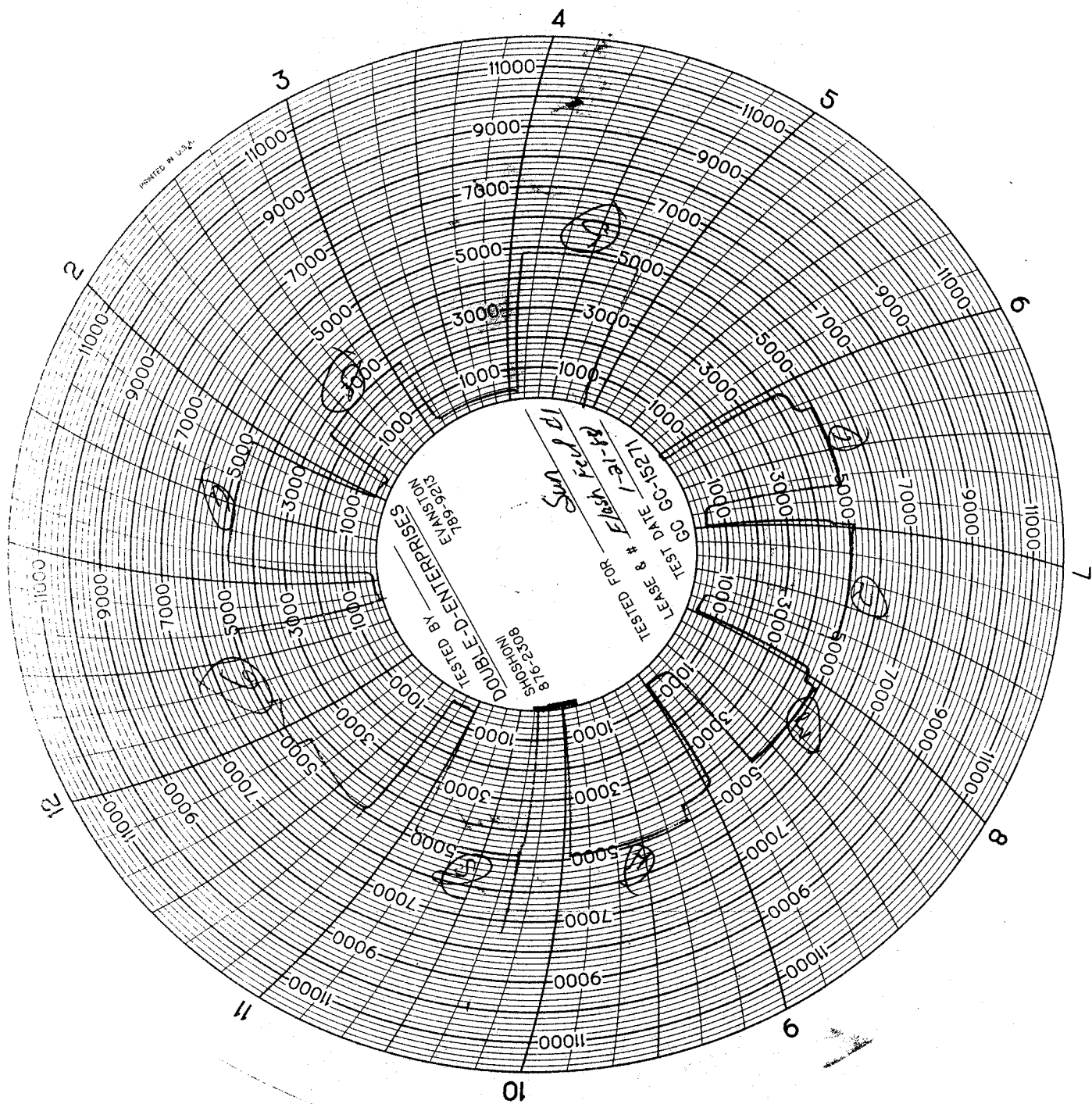
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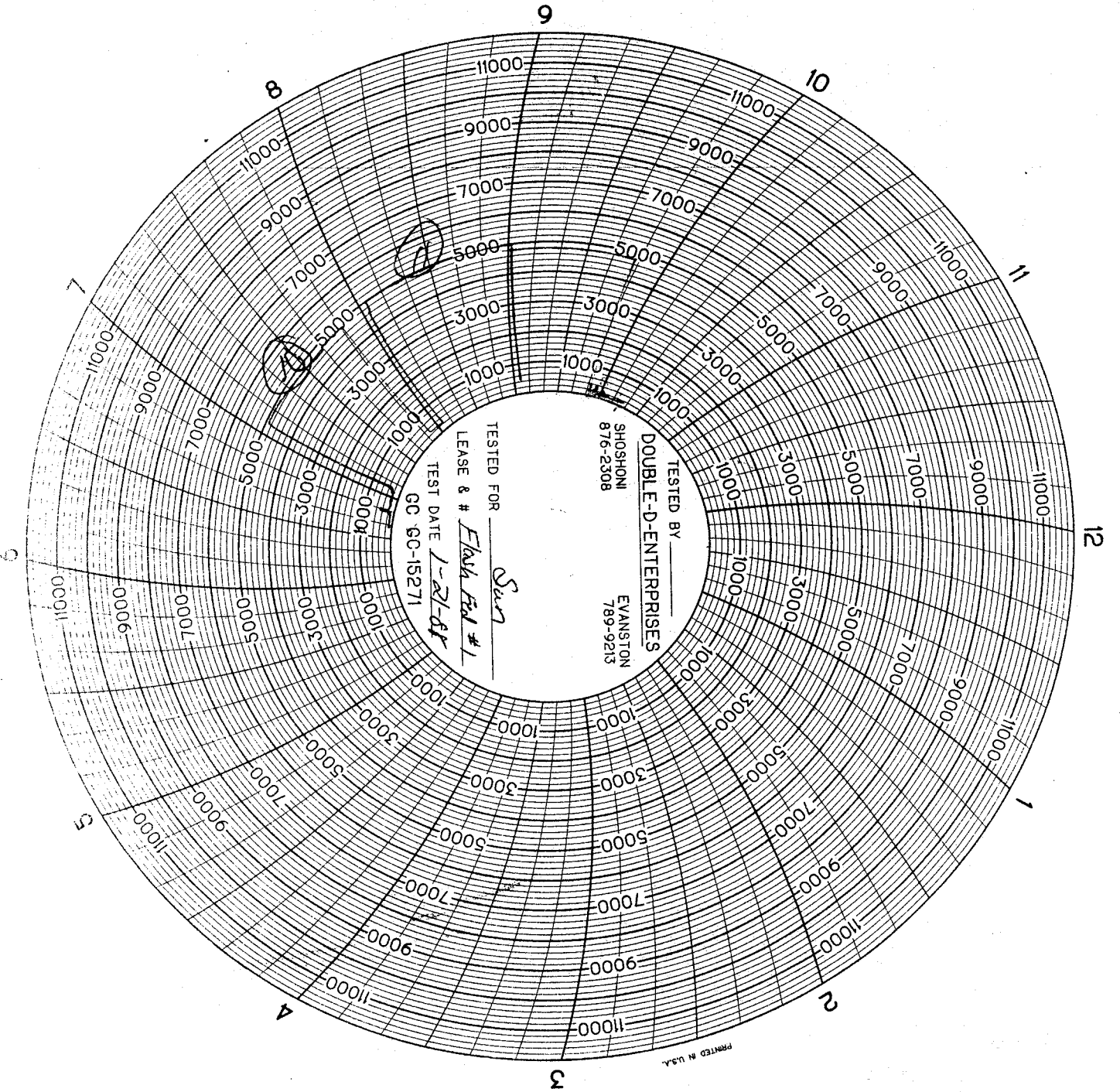
TAX

TOTAL

COMPANY		LEASE AND WELL NAME #	DATE OF TEST	RIG # AND NAME
Sun Exploration		Flash Fed. #1	1-21-88	Grace 269
ST#	TIME			
1	12:15	inside valve on manifold. 5,000 psi For 15 min		
2	12:35	Second valves on manifold. 5,000 psi For 15 min		
3	12:53	Third valves on manifold. 5,000 psi For 15 min		
4	1:12	Super choke. 5,000 psi For 15 min		
5	4:36	Lower pipes. 5,000 psi For 15 min		
6	4:55	Upper pipes. Part, Check, HCR. 5,000 psi For 15 min		
7	5:22	Upper pipes. TIW. Manual choke + Kill Line 5,000 psi For 15 min		
8	5:43	Hydrill, riser valve 2,500 psi For 15 min		
9	6:18	Blinds valves behind check valve. 5,000 psi For 15 min		
10	6:44	Upper Kelly. 5,000 psi For 15 min		
11	7:03	Lower Kelly. 5,000 psi For 15 min		







DOUBLE JACK TESTING & SERVICES, INC.

B.O.P. Test Report

012112

B.O.P. Test Performed on (date) 12-16-87

Oil Company Sun Explortion

Well Name & Number Flash Federal 1 43-043-30282 D.H.

Section 18

Township 3n

Range 15e

County Summit Utah

Drilling Contractor Grace Drlg 269

Oil Company Site Representative Bill Olson

Rig Tool Pusher Buzz

Tested out of Evanston Wyo

Notified Prior to Test Utah Oil Gas

Copies of This Test Report Sent to: Utah Oil Gas

Rig site

Evanston Wyo

Original Chart & Test Report on File at: Evanston Wyo

Tested by: Double Jack Testing & Services, Inc.
108 Parkview Road
P.O. Box 2097
Evanston, Wyoming 82930

Double Jack Testing & Service Inc.

P.O. Box 2097

Evanson, Wyoming 82930

(307) 789-9213

FIELD

TICKET

5731

DATE

12-16-87

OPERATOR

Exploration Production

COUNTY

Summit

STATE

Utah

SECTION

18

RIG NAME AND #

Grace Drilling 269

WELL NAME AND NO.

Flash Federal #

TOWNSHIP

3N

RANGE

15E

EQUIPMENT TESTED

RAMS 5000 psi 15 mins
 RAMS 5000 psi 15 mins
 RAMS 5000 psi 15 mins
 ANNULAR B.O.P. 3600 psi 15 mins
 CHOKE LINE 5000 psi 15 mins
 KILL LINE 5000 psi 15 mins
 UPPER KELLY 5000 psi 15 mins
 LOWER KELLY 5000 psi 15 mins
 SAFETY VALVES 5000 psi 15 mins

ADDITIONAL TESTS & COMMENTS

Called swaco replaced sensor line thawed out air lines tested to 5000 psi
 Tightened flange on back side of Tee Block on choke manifold
 replace 4 1/2" manual valve on choke line

CLOSING UNIT PSI 3000 psi CLOSING TIME OF RAMS 45 secs HYDRIL 18 secs

CLOSED CASING HEAD VALVE yes SET WEAR RING yes

TESTS

INITIAL RATES	700 ⁰⁰ for first 8 hrs	700 ⁰⁰
ADDITIONAL	7 hrs at 50 ⁰⁰ per hr	350 ⁰⁰
TRAVEL	140 miles at 1 ⁰⁰ per mile out of Evanson	140 ⁰⁰
TEST PLUG	10 WKm	NC
TEST TOOL	4 jaw slot (Left in bit house has 4 1/2 IF threads)	NC
UPPER SUB.	4 1/2 IF	NC
LOWER SUB.	4 1/2 IF	NC
OVER SUB.	4 1/2 IF to 4 1/2 IF	NC
INTERNAL	80 gals at 2 ⁰⁰ per gal	160 ⁰⁰
OTHER	2 hrs time out of location no charge	NC

TESTED BY Mike Gyllhus

SIGNATURE 

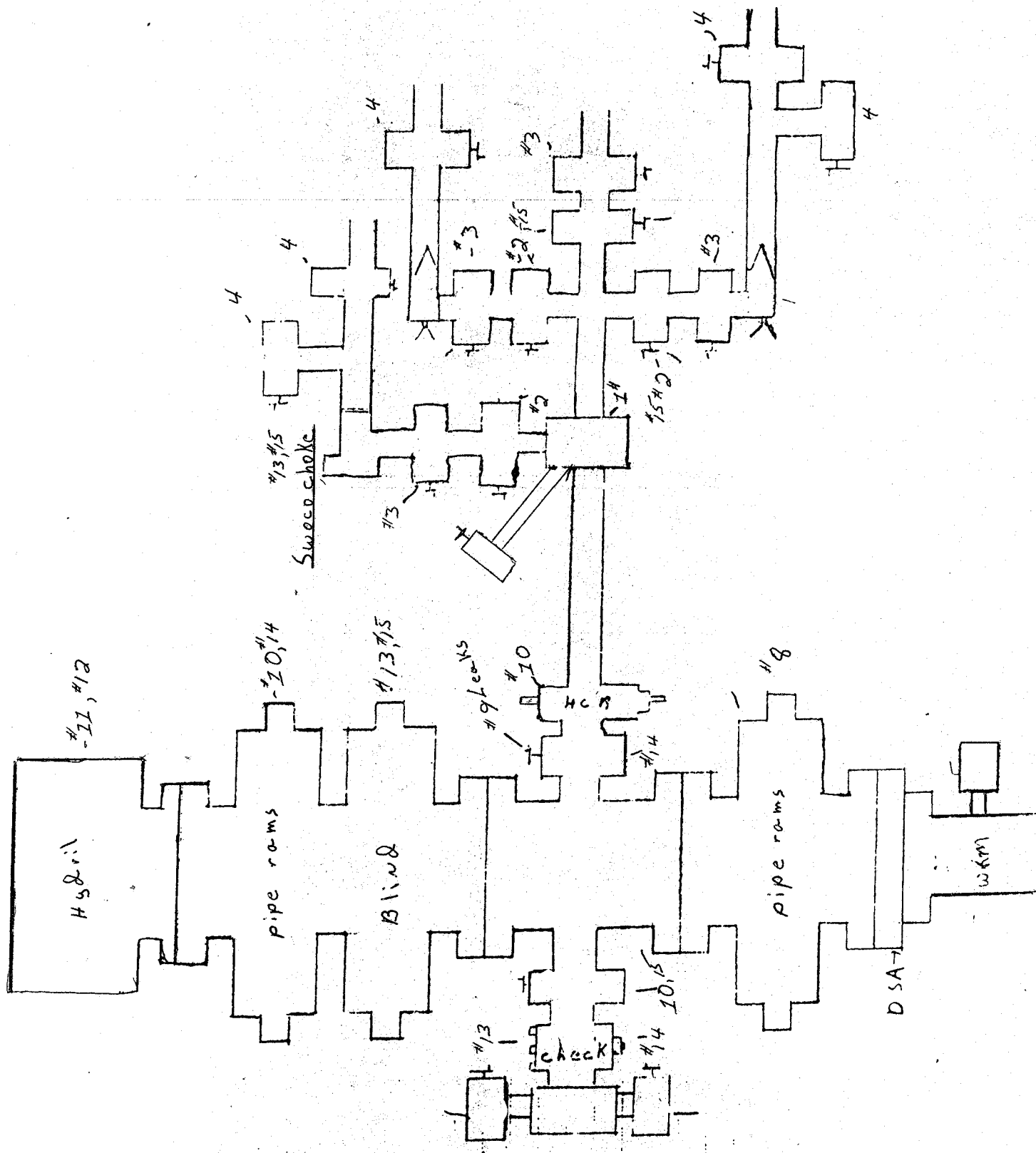
COMPANY REPRESENTATIVE

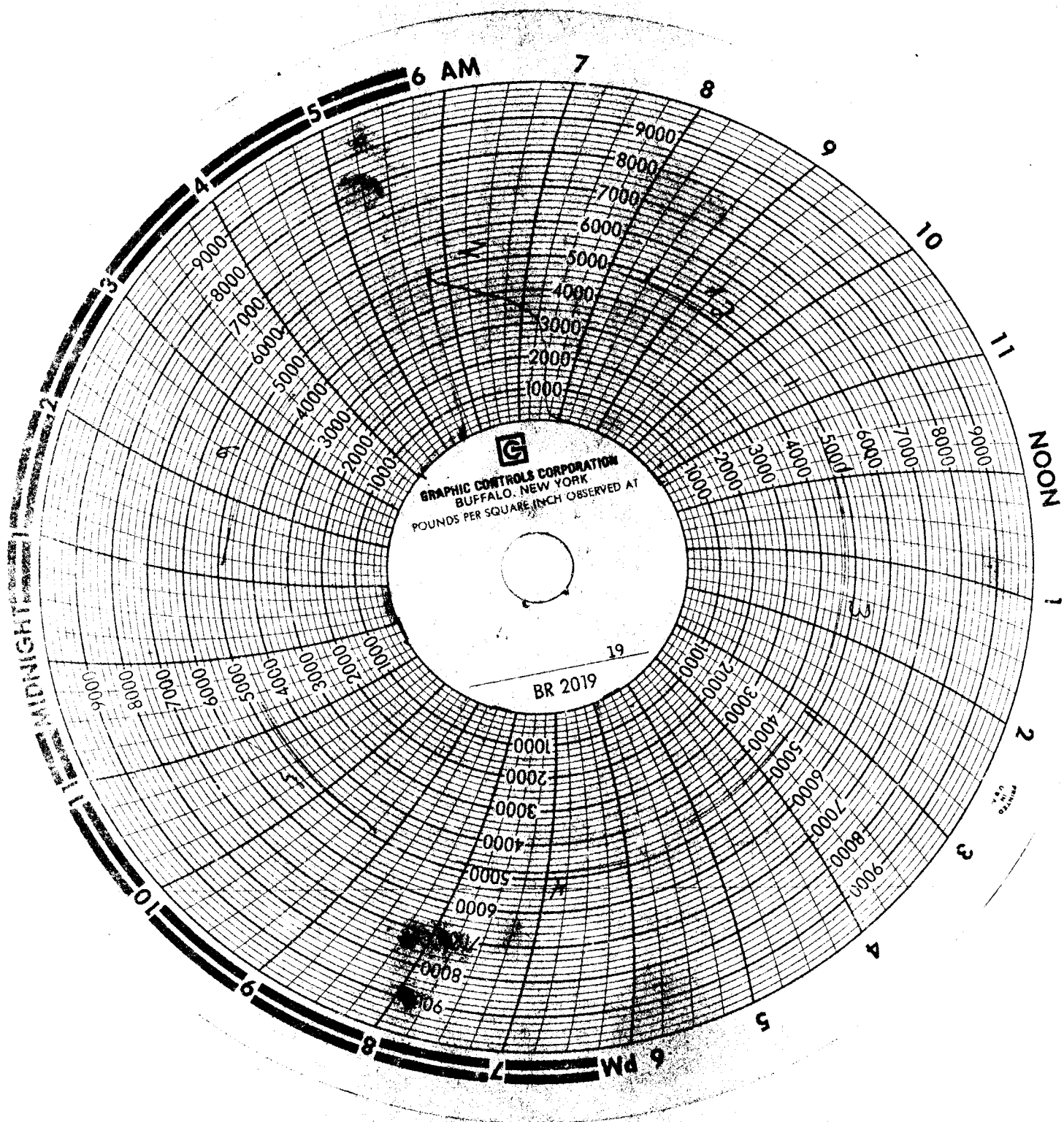
SUBTOTAL 1350⁰⁰

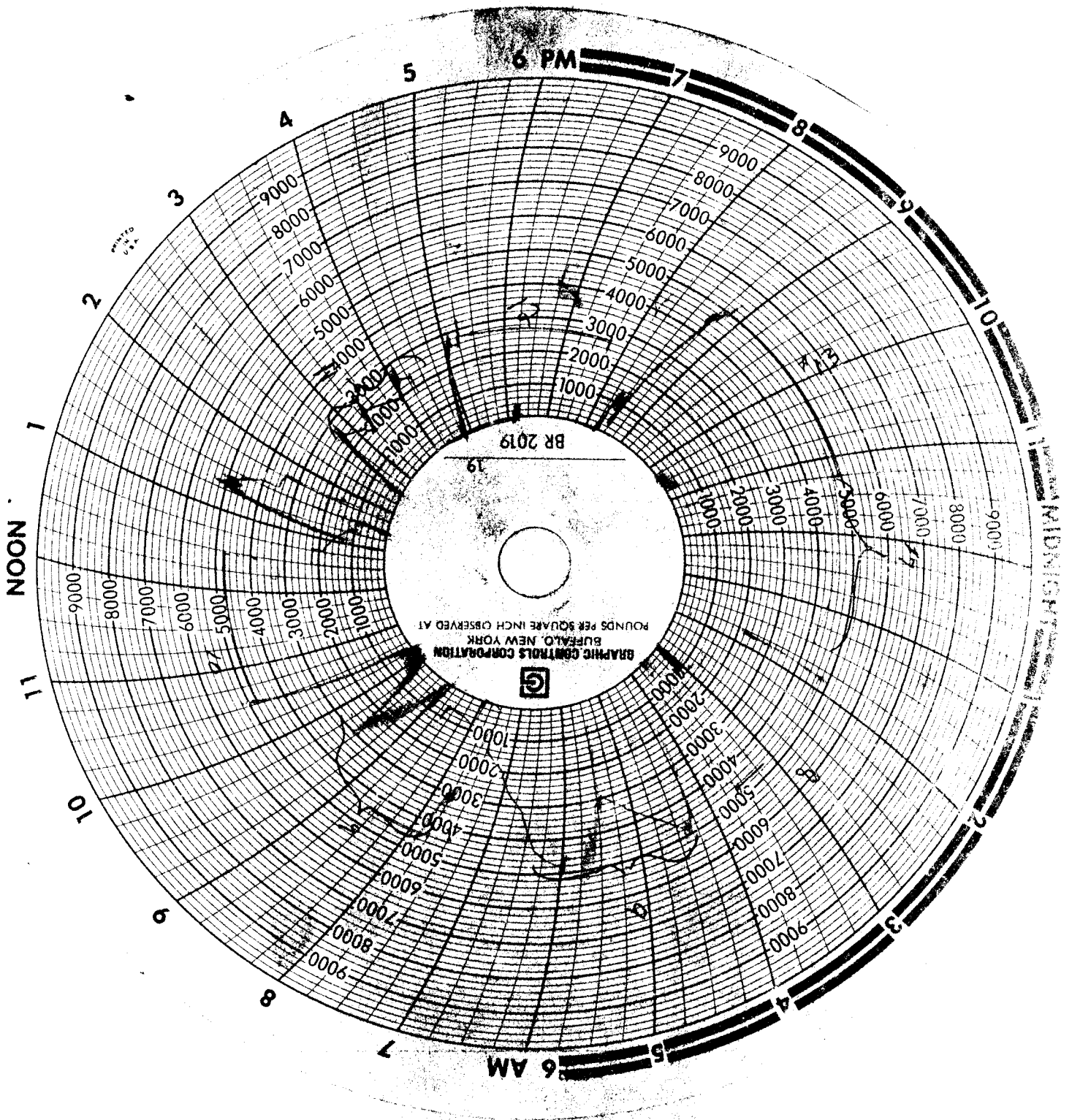
TAX

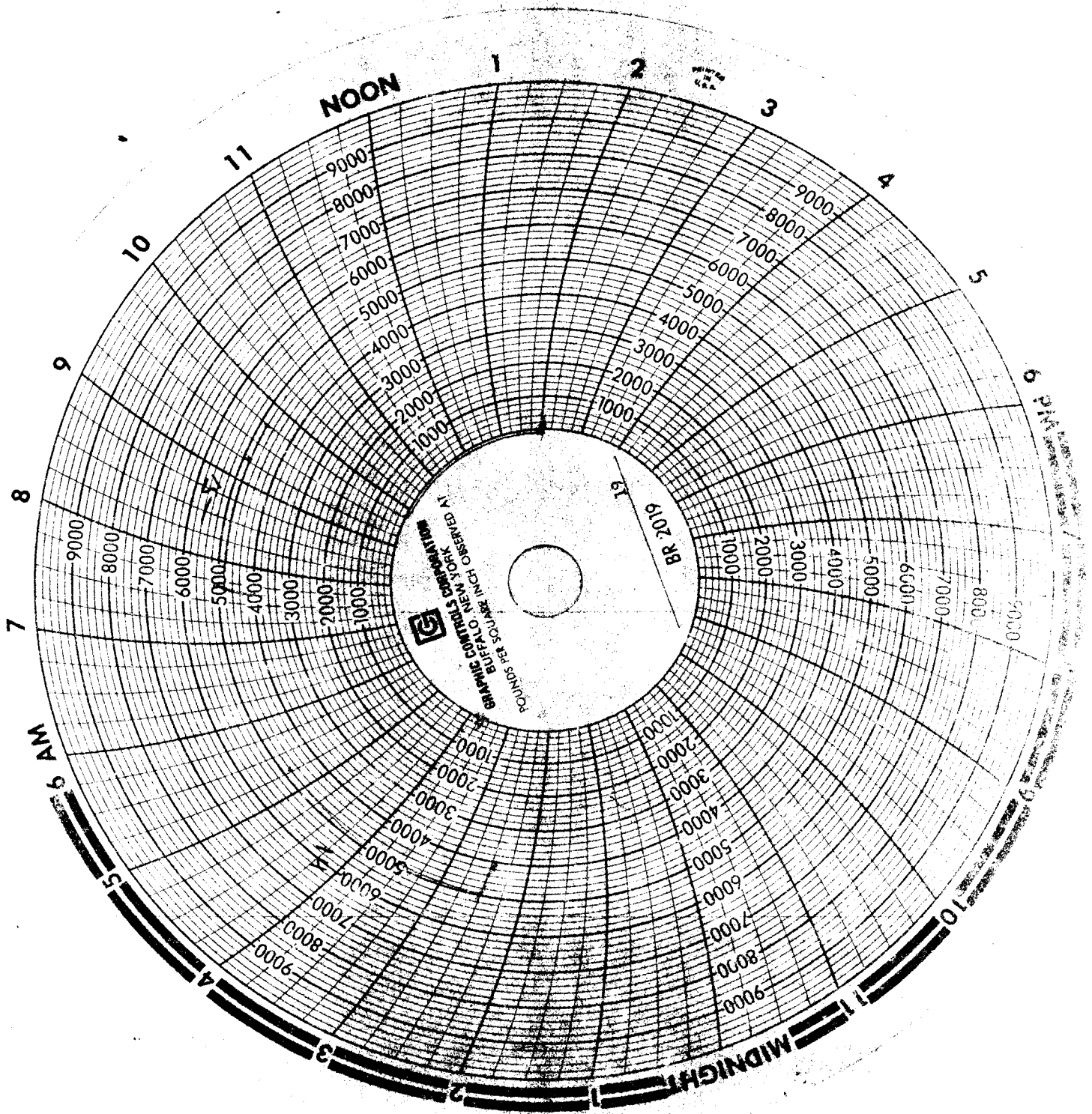
TOTAL

COMPANY		LEASE	WELL NAME #	DATE OF TEST	RIG # AND NAME
Sun Exploration		Flash Federal #1		12-16-87	Grace 269
TEST #	TIME				
	2:45	Arrive on location rig up to test manifold			
1	3:15	Leak on 4 1/2 flange on Tee Block on manifold			
2	3:30-3:45	test 3 inside manual valves on manifold			
3	3:50-4:20	5000psi test four manual valves on manifold			
4	4:35-4:50	5000psi test outside 5 manual valves on manifold			
	4:55	pressure up to 1000psi on manual chokes			
	5-6:30 AM	wait to inspect Bottom hole assembly rig up Kelly to test			
5	7:05-7:20	5000psi test Lower Kelly			
6	7:25-7:40	5000psi test Upper Kelly (note lost 150 psi in 15 mins) set Kelly back, picked up test plug after pulling wearing rig up to test			
7	8:05-8:20	Leak on Kelly sub (direct sub)			
8	8:20-8:35	5000psi test lower pipes inside BOP on joint of pipe			
9	8:36-9:00	Leaks on 4" manual valve on choke line, worked several times flushed under pressure, worked up valve, tried to pressure up on back side of valve			
10	9:05-9:20	5000psi test, inside manual on Kill line, HCR valve on choke line, Top pipe rams, Dart valve			
11	9:25-9:35	2500psi Leaks on Hydril increase pressure worked twice			
12	9:35-9:50	2500psi test Hydril, vertical riser on manifold			
13	10:15-10:30	5000psi test Blind rams, check valve on Kill line			
	11:00-5:30	Decided to change out 4" valve on choke line tool pusher went to Grace 90 got valve ripped up to test			
14	6:05-6:20	5000psi test top pipe rams, check valve on Kill line 4" manual valve on choke line			
15	6:30-6:45	5000psi test Blind rams, manual on Kill line Swaco choke			
	6:50-7:25	pull test plug set wearing rig down testers			









CONFIDENTIAL

State
CopiesForm 3160-5
(November 1993)
(Formerly 9-331)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTSUBMIT IN TRIPPLICATE*
(Other instructions on re-
verse side)Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.

11-27918

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Flash Federal

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

Sec 18-3N-15E

12. COUNTY OR PARISH

Summit

Utah

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug
Use "APPLICATION FOR PERMIT" for such1. OIL ☐ GAS ☐ OTHER ☐

2. NAME OF OPERATOR

Sun Exploration & Production Company

3. ADDRESS OF OPERATOR

P.O. Box 5940 T.A., Denver, CO 80217

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also space 17 below.)
At surface

NESW 900' FSL & 2600' FWL (SL) 1980' FSL & 1980' FWL (BHL)

14. PERMIT NO.

43-043-30282

15. ELEVATIONS (Show whether DF, RT, CR, etc.)

8733' GR

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other) History

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(Note: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any
proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones perti-
nent to this work.)

- Spud surface hole @ 3 am 8-31-87
- Ran 117 jts 9 5/8 40# K-55 118c csg/ Cs @ 6007/ Fc @ 4923/ DV @ 2021/ Cmt'd 1st stage w/ 700 sx Lite w/3% CaCl & 1#/sx Flocele/ Tailed w/300 sx Class G w/1#/sx Flocele/ Did not bump plug/ Open DV & circ 4 hrs w/no cement to surf/ Cmt 2nd stage w/1200 sx Lite w/3% CaCl & 1#/sx Flocele/ Tailed w/200 sx Class A w/1% CaCl & 1#/sx Flocele/ Circ 80 sx excess cmt to surf/ Had good returns entire job/ FP 800#/ Close DV w/1200#/ Float held
- Dakota/ Core #1/ Core from 15,238-15,257
- Cored 15,274-15,287/ Dual Induction to 15,493/ Rih w/Density Neutron/ Wireline TD 15,543/ Wireline formation tops/ Mesa Verde 10,622/ Frontier 14,739/ Mowry 14,854/ Dual induction 15,543-5000/ Density Neutron 15,543-14,500/ Sonic 14,750-5000/ Sonic tool stopped @ 14,750/ Trip in hole to 5000
- Welex ran Sonic-CL f/15,466-14,390/ DLL f/15,420-14,700/ FWAT f/15,420-14,700/ Dip meter f/15,310-14,400/ Mw 9.9 vis 83
- 15,600 TD/ Rih to 15,515/ W&R from 15,515-15,600/ Tih w/10 jts of tbg on DP to 15,117/ Howco spot 100 sx 15,117 to 14,900 and 100 sx 14,833 to 14,630/ Toh to 12,955 and spot 300 sx Class H / PBTD 12,510
- Miru Halliburton/ Spotted 100 sx Class G cement plug w/35% Silica Flour, 0.5% HR-5 from 15,100-14,000/ Spot 300 sk Class G cmenet plug w0.75% CFR-2, 0.4% HR-5, 2% KCL from 14,600-14,300
- Halliburton set 300 sx plug f/14,600-14,300 w/Prem cmt & 3/4% CFR-2 & .4% HR-5 & 2% Kcl Preceeded by 30 bbl fw & followed w/6 bbl fw & disp

18. I hereby certify that the foregoing is true and correct

SIGNED

TITLE Pror & Prod Acctg Suvpr

DATE

4-26-88

(This space for Federal or State office use)

APPROVED BY
CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

9. Halliburton set 300 sx Premium Ag 250 & 3/4% CFR-2 & .3% HR-5 & 2% KCL/ Preceeded w/30 bbls fw & followed by 5.5 bfw
10. R&C 377 jts 4½ 20 & 23# N-80 LTC & BTC csg/ CS 15,983/ FC 15,893/ Howco cmt'd w/350 sx CL H w/35% SSA-1 3% KCl, .5% CFR-3, .6% Halad-24, and .2% HR-5 followed by 350 sx Class H w/35% SSA-1, 3% KCl, .5% CFR-3, .6% Halad-24, .2% HR-5 and .2% Super CBL
11. Released rig @ 10:00 pm 3/28/88
12. Unload 2-7/8 6.5# L-80 tbg/ Tagged @ 15,799
13. Schl/ Ran CBL-GR-CCL 15,920-14,350 and CET 15,910-14,400 w/2000# on csg/ Attempt to run CNL-GR/ Tool failed/ Ran GR-JB while waiting on CNL tool/ Ran CNL-GR 15,914-14,400 and 12,500-14,400
14. Set w/pkr @ 15,671/ Tag release @ 15,750
15. Perf 15,792-15,822 f/CNL-GR/ w/3-3/8 Van Gun/ Guns fired @ 2:50 pm/ In 8 min pressure incr to 2750#/
16. TA until possible conversion to disposal well

CONFIDENTIAL

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
(CORRECTED)

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

14

5. LEASE DESIGNATION AND SERIAL NO.

U-27918

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Flash Federal

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Sec. 18-3N-15E

12. COUNTY OR PARISH

Summit

13. STATE

Utah

1a. TYPE OF WELL:

OIL WELL ☐ GAS WELL ☐ DRY ☐

b. TYPE OF COMPLETION:

NEW WELL ☐ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐

2. NAME OF OPERATOR

SUN EXPLORATION AND PRODUCTION COMPANY

3. ADDRESS OF OPERATOR

P.O. BOX 5940 T.A. Denver, Colorado 80217

DIVISION OF
OIL, GAS & MINING

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*

At surface

900' FSL & 2600' FWL NESW

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

43-043-30282

MAY 12 1988

15. DATE SPUDDED 8-31-87 16. DATE T.D. REACHED 3-5-88 17. DATE COMPL. (Ready to prod.) 4-25-88 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 8733' 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 15,983' 21. PLUG, BACK T.D., MD & TVD 15,927 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* T.A. 25. WAS DIRECTIONAL SURVEY MADE Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN

DTL/DNL/WL/Sonic/FWAT/Dipmeter/CBL-GR-CCL/CET/CNL-GR/GR-JB

27. WAS WELL CORED

Yes

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8	40#	5,007	12-1/4	2400 Sxs	
5-1/2	20 & 23#	15,983	8-3/4 & 8 1/4	700 Sxs	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-7/8"	15,750	15,671

31. PERFORATION RECORD (Interval, size and number)

15,792-15,882 3 3/8" van gun

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.* PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
T.A.		Temporarily Abandoned				T.A.	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
			→				
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
		→					

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

Logs, Core Analysis

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Ernest Bush TITLE Pror. & Prod. Acctg. Supvr. DATE 4-26-88

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions. If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool. **Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORDED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES		38. GEOLOGIC MARKERS	
FORMATION	TOP	NAME	MEAS. DEPTH TOP VERT. DEPTH
MESA VERDE	10622'		
HILLIARD	12411'		
FRONTIER	14739'		
MOWRY	14854'		
DAKOTA	15079'		

Subject

WATER COMPATIBILITY: FLASH FEDERAL NO. 1, WILDCAT,
ROCKY MOUNTAIN DISTRICT

Interoffice
Correspondence

Date May 11, 1988
Location Technology Center
From Fred Eisen, Production Service Laboratory
To Rita Monroe Galvin
Denver

Attached are the results of analyses performed on two water samples received at the PSL on May 6, 1988. These waters were commingled produced water from Luckey Ditch and disposal water from Phillips. Also attached is a recent water analysis report for the Flash Federal No. 1. A compatibility evaluation was made for mixtures of these three waters.

The analyses results show that the Luckey Ditch produced and Phillips waters are very similar to each other. Both, by themselves, have a slight tendency to form barium sulfate scale at temperatures of 125° F or less with the Luckey Ditch water having the smaller tendency. Both waters, by themselves, also have a slight to moderate and approximately equal potential to form calcium carbonate. Mixtures of these two waters have this same slight tendency. The barium sulfate potential for mixtures of these two waters is again slight and intermediate between that of the individual waters alone.

The Flash Federal No. 1 water analysis shows no barium and, therefore, exhibits no potential to form barium sulfate by itself. (Hopefully, barium has not already precipitated and dropped out of the water prior to the sampling point.) It does show a slight to moderate tendency for calcium carbonate scaling which is at a slightly lower level than that for the Luckey Ditch and Phillips waters.

To evaluate mixtures of all three waters, a 50/50 mixture of Luckey Ditch and Phillips waters was assumed. Since these waters are similar, modest changes in the ratio of these waters will not change the assessment significantly. Mixtures of the Flash Federal No. 1 water and this 50/50 mix does exhibit a slight barium sulfate scale tendency, but the level is approximately the same as for mixtures of just the Luckey Ditch and Phillips waters. In other words, adding the Flash Federal water does not significantly increase the potential to form barium sulfate. Similarly, mixtures of all three waters have a tendency to form calcium carbonate, but the inclusion of Flash Federal actually reduces the tendency slightly. Consequently, adding the Flash Federal water does not increase the potential to form calcium carbonate.

If you have any questions or wish to discuss this further, contact me at the PSL.

Fred Eisen

Fred Eisen
Chemical Engineering Section

WM

cc: Pete Dellinger
Pat Phelan

Tom Golden - Denver
Jim Schneider - Denver

Wayland Moody - NPIV 1155
File: RM-Wildcat

LABORATORY COPY

SUN 5434

SUN PRODUCTION COMPANY

WATER ANALYSIS REPORT

PRODUCTION SERVICE LABORATORY

ANALYSIS NO. E-4912

FILE _____

Operator SUN E & P *530740*

Lease or Well FLASH FEDERAL #1

Formation DAKOTA

Perfs 15792 To 15822 ;T.D. _____

Method of Collecting Sample FLASH FEDERAL 1
WELLHEAD

Treatment _____

Date of last acid job _____

District ROCKY MOUNTAIN

Field WILDCAT

County SUMMIT

State UTAH

Collected by _____

Date 04/18/88

04/25/88

Collected

Analyzed

Sample No. 53312

Analyst CRW PPI

Total Prod.

BOPD

BWPD

MCFPD

Description of Sample 1 PINT CLOUDY LIQUID WITH BLACK SEDIMENT

CONSTITUENTS

ppm

Sodium 3520

Calcium 36

Magnesium 4

Barium 0

Strontium _____

Potassium _____

Iron 56

Chloride 4540

Sulfate 276

Carbonate 0

Bicarbonate 1440

TOTAL DISSOLVED SOLIDS

9872

OTHER PROPERTIES

pH 7.4

Specific Gravity 1.0080

Resistivity ohm-mtr. @ 75 F 0.6622

Loss on Ignition, ppm _____

Total Solids by Evap., ppm _____

Organic acids, ppm _____

Hardness as CaCO₃, ppm _____

Sulfide ABSENT

Mixed Oxides (Qualitative) _____

Fluoride, ppm _____

Silica, ppm _____

Total Iron, ppm 849

Nitrates, ppm _____

Phosphate, ppm _____

REMARKS:

Swab sample from new completion.
Analysis requested for record. This
sample may contain some residual
completion fluids but does appear to
be more representative of formation
water than the companion 4/16/88
sample.

REPORTED BY:

Fred Eisen

CHEMICAL ENGINEERING SECTION

Copies to:

Bob Barman - NPIV 1125

Danny Bell - CCII 414

Chip Claiborne - Denver

Pete Dellinger

Rita Monroe Galvin - Denver

Tom Golden - Denver

Pat Phelan

Jim Schneider - Denver

Steve Stearns - Denver

File

3260, 40,

LABORATORY COPY

SUN 5434

SUN PRODUCTION COMPANY

WATER ANALYSIS REPORT

ANALYSIS NO. E-4981

PRODUCTION SERVICE LABORATORY

FILE _____

Operator SUN E&P 605003Lease or Well LUCKEY DITCH

Formation _____

Perfs _____ To _____ ; T.D. _____

Method of Collecting Sample 400 BBL STORAGE

Treatment _____

Date of last acid job _____

Total Prod.

BOPD

BWPD

MCFPD

District DENVER CO.Field LUCKEY DITCHCounty UNITAState WYO.

Collected by _____

Date 04/26/8805/10/88

Collected

Analyzed

Sample No. 61291Analyst ERW PPIDescription of Sample 1 PINT GREY LIQUID

CONSTITUENTS

ppm

Sodium	<u>2670</u>
Calcium	<u>26</u>
Magnesium	<u>0</u>
Barium	<u>1</u>
Strontium	_____
Potassium	_____
Iron	<u>2</u>
Chloride	<u>3380</u>
Sulfate	<u>123</u>
Carbonate	<u>1</u>
Bicarbonate	<u>1190</u>
_____	_____
_____	_____
_____	_____
_____	_____

TOTAL DISSOLVED SOLIDS

7393

OTHER PROPERTIES

pH	<u>8.3</u>
Specific Gravity	<u>1.0060</u>
Resistivity ohm-mtr. @ 75 F	<u>0.8920</u>
Loss on Ignition, ppm	_____
Total Solids by Evap., ppm	_____
Organic acids, ppm	_____
Hardness as CaCO ₃ , ppm	_____
Sulfide	<u>ABSENT</u>
Mixed Oxides (Qualitative)	_____
Fluoride, ppm	_____
Silica, ppm	_____
Total Iron, ppm	<u>15</u>
Nitrates, ppm	_____
Phosphate, ppm	_____
_____	_____
_____	_____

REMARKS:

Commingleed Luckey Ditch produced water for possible injection into Flash Federal.

Frederic S. Eisen

REPORTED BY:

Fred Eisen

CHEMICAL ENGINEERING SECTION

Copies to:

SUN 5434

SUN PRODUCTION COMPANY WATER ANALYSIS REPORT
PRODUCTION SERVICE LABORATORYANALYSIS NO. E-4985

FILE _____

Operator SUN E&PLease or Well PHILLIPS PET WATER SAMPLE

Formation _____

Perfs _____ To _____ ; T.D. _____

Method of Collecting Sample PHILLIPS INJECTION
H2O

Treatment _____

Date of last acid job _____

Total Prod.

BOPD

BWPD

MCFPD

District DENVER CO.

Field _____

County _____

State WYO.

Collected by _____

Date 04/28/8805/10/88

Collected

Analyzed

Sample No. 61660Analyst ERD PPIDescription of Sample 1 PINT GREY LIQUID

CONSTITUENTS

ppm

Sodium	2500
Calcium	25
Magnesium	4
Barium	2
Strontium	
Potassium	
Iron	3
Chloride	3000
Sulfate	98
Carbonate	0
Bicarbonate	1440

TOTAL DISSOLVED SOLIDS

7072

OTHER PROPERTIES

pH	8.2
Specific Gravity	1.0042
Resistivity ohm-mtr. @ 75 F	0.9920
Loss on Ignition, ppm	
Total Solids by Evap., ppm	
Organic acids, ppm	
Hardness as CaCO ₃ , ppm	
Sulfide	ABSENT
Mixed Oxides (Qualitative)	
Flouride, ppm	
Silica, ppm	
Total Iron, ppm	5
Nitrates, ppm	
Phosphate, ppm	

REMARKS:

Phillips disposal water for possible
injection into Flash Federal.*Frederic S. Eisen*

REPORTED BY: Fred Eisen

CHEMICAL ENGINEERING SECTION

Copies to:

A = L.D. COMINGLED

B = PHILLIPS

NA :	2860	2950
CA :	24	22
MG :	3	3
BA :	1	2
SR :	0	0
CL :	3380	3000
SO4 :	123	98
CO3 :	1	0
HCO3 :	1190	1440
pH :	8.3	8.2

 BARIUM SULFATE SCALING TENDENCY
 #####

%A	%B	TEMPERATURE (DEGREES F)	AMT OF BARIUM SULFATE FORMED (LB/1000 BBL)

0	100	75	0.78
25	75	75	0.66
50	50	75	0.53
75	25	75	0.41
100	0	75	0.27

0	100	100	0.66
25	75	100	0.55
50	50	100	0.43
75	25	100	0.30
100	0	100	0.18

0	100	125	0.22
25	75	125	0.13
50	50	125	0.04
75	25	125	-0.06
100	0	125	-0.17

0	100	150	-0.17
25	75	150	-0.24
50	50	150	-0.31
75	25	150	-0.40
100	0	150	-0.49

0	100	175	-0.25
25	75	175	-0.31
50	50	175	-0.38
75	25	175	-0.46
100	0	175	-0.55

0	100	200	-0.41
25	75	200	-0.46
50	50	200	-0.52
75	25	200	-0.59
100	0	200	-0.67

 L.D. COMINGLED WATER MIXED WITH PHILLIPS WATER

A = L.D. COMINGLED

B = PHILLIPS

.....

 CALCIUM SULFATE SCALING TENDENCY
 #####

%A	%B	TEMPERATURE (DEGREES F)	AMT OF CALCIUM SULFATE FORMED (LB/1000 BBL)
----	----	----------------------------	--

** TEMP NOT USED IN CASO4 CALCULATIONS **

0	100	0 *	-1.57
25	75	0 *	-1.48
50	50	0 *	-1.40
75	25	0 *	-1.33
100	0	0 *	-1.26

CALCIUM CARBONATE SCALING TENDENCY

100 % L.D. COMINGLED WATER AND 0 % PHILLIPS WATER

** MIXED pH = 8.3 **
SCALING INDEX @ 75 FARENHEIT IS 0.87
SCALING INDEX @ 100 FARENHEIT IS 1.37
SCALING INDEX @ 125 FARENHEIT IS 1.97

75 % L.D. COMINGLED WATER AND 25 % PHILLIPS WATER

** MIXED pH = 8.3 **
SCALING INDEX @ 75 FARENHEIT IS 0.85
SCALING INDEX @ 100 FARENHEIT IS 1.35
SCALING INDEX @ 125 FARENHEIT IS 1.95

50 % L.D. COMINGLED WATER AND 50 % PHILLIPS WATER

** MIXED pH = 8.2 **
SCALING INDEX @ 75 FARENHEIT IS 0.84
SCALING INDEX @ 100 FARENHEIT IS 1.34
SCALING INDEX @ 125 FARENHEIT IS 1.94

25 % L.D. COMINGLED WATER AND 75 % PHILLIPS WATER

** MIXED pH = 8.2 **
SCALING INDEX @ 75 FARENHEIT IS 0.82
SCALING INDEX @ 100 FARENHEIT IS 1.32
SCALING INDEX @ 125 FARENHEIT IS 1.92

0 % L.D. COMINGLED WATER AND 100 % PHILLIPS WATER

** MIXED pH = 8.2 **
SCALING INDEX @ 75 FARENHEIT IS 0.81
SCALING INDEX @ 100 FARENHEIT IS 1.31
SCALING INDEX @ 125 FARENHEIT IS 1.91

A = MIX PHIL/LUCKY

B = FLASH FED #1

```

.....
NA :          2905          3260
CA :          23           40
MG :          3            4
BA :          2            0
SR :          0            0
CL :          3190         4540
SO4 :         111          276
CO3 :          1            0
HCO3:         1315         1440
pH :          8.3           7.4
  
```


 BARIUM SULFATE SCALING TENDENCY
 #####

%A	%B	TEMPERATURE (DEGREES F)	AMT OF BARIUM SULFATE FORMED (LB/1000 BBL)

0	100	75	-0.14
25	75	75	0.13
50	50	75	0.39
75	25	75	0.63
100	0	75	0.83

0	100	100	-0.18
25	75	100	0.08
50	50	100	0.33
75	25	100	0.56
100	0	100	0.73

0	100	125	-0.34
25	75	125	-0.10
50	50	125	0.11
75	25	125	0.27
100	0	125	0.34

0	100	150	-0.48
25	75	150	-0.27
50	50	150	-0.10
75	25	150	0.01
100	0	150	-0.01

0	100	175	-0.51
25	75	175	-0.30
50	50	175	-0.14
75	25	175	-0.04
100	0	175	-0.08

0	100	200	-0.57
25	75	200	-0.37
50	50	200	-0.22
75	25	200	-0.14
100	0	200	-0.22

Subject WATER COMPATIBILITY: FLASH FEDERAL NO. 1, WILDCAT,
 ROCKY MOUNTAIN DISTRICT

Interoffice
Correspondence

Date May 11, 1988
Location Technology Center
From Fred Eisen, Production Service Laboratory
To Rita Monroe Galvin
 Denver

Attached are the results of analyses performed on two water samples received at the PSL on May 6, 1988. These waters were commingled produced water from Luckey Ditch and disposal water from Phillips. Also attached is a recent water analysis report for the Flash Federal No. 1. A compatibility evaluation was made for mixtures of these three waters.

The analyses results show that the Luckey Ditch produced and Phillips waters are very similar to each other. Both, by themselves, have a slight tendency to form barium sulfate scale at temperatures of 125° F or less with the Luckey Ditch water having the smaller tendency. Both waters, by themselves, also have a slight to moderate and approximately equal potential to form calcium carbonate. Mixtures of these two waters have this same slight tendency. The barium sulfate potential for mixtures of these two waters is again slight and intermediate between that of the individual waters alone.

The Flash Federal No. 1 water analysis shows no barium and, therefore, exhibits no potential to form barium sulfate by itself. (Hopefully, barium has not already precipitated and dropped out of the water prior to the sampling point.) It does show a slight to moderate tendency for calcium carbonate scaling which is at a slightly lower level than that for the Luckey Ditch and Phillips waters.

To evaluate mixtures of all three waters, a 50/50 mixture of Luckey Ditch and Phillips waters was assumed. Since these waters are similar, modest changes in the ratio of these waters will not change the assessment significantly. Mixtures of the Flash Federal No. 1 water and this 50/50 mix does exhibit a slight barium sulfate scale tendency, but the level is approximately the same as for mixtures of just the Luckey Ditch and Phillips waters. In other words, adding the Flash Federal water does not significantly increase the potential to form barium sulfate. Similarly, mixtures of all three waters have a tendency to form calcium carbonate, but the inclusion of Flash Federal actually reduces the tendency slightly. Consequently, adding the Flash Federal water does not increase the potential to form calcium carbonate.

If you have any questions or wish to discuss this further, contact me at the PSL.

Fred Eisen

Fred Eisen
Chemical Engineering Section

WM

cc: Pete Dellinger
Pat Phelan

Tom Golden - Denver
Jim Schneider - Denver

Wayland Moody - NPIV 1155
File: RM-Wildcat

SUN 5434

SUN PRODUCTION COMPANY

WATER ANALYSIS REPORT

PRODUCTION SERVICE LABORATORY

ANALYSIS NO. E-4981

FILE _____

Operator SUN E&P 605003Lease or Well LUCKEY DITCH

Formation _____

Perfs _____ To _____ ; T.D. _____

Method of Collecting Sample 400 BBL STORAGE

Treatment _____

Date of last acid job _____

Total Prod.	BOPD	BWPD	MCFPD

District DENVER CO.Field LUCKEY DITCHCounty UNITAState WYO.

Collected by _____

Date 04/26/8805/10/88

Collected

Analyzed

Sample No. 61291Analyst ERW PPIDescription of Sample 1 PINT GREY LIQUID

CONSTITUENTS	ppm
Sodium	<u>2670</u>
Calcium	<u>26</u>
Magnesium	<u>0</u>
Barium	<u>1</u>
Strontium	_____
Potassium	_____
Iron	<u>2</u>
Chloride	<u>3380</u>
Sulfate	<u>123</u>
Carbonate	<u>1</u>
Bicarbonate	<u>1190</u>
_____	_____
_____	_____
_____	_____
_____	_____
TOTAL DISSOLVED SOLIDS	<u>7393</u>

OTHER PROPERTIES	
pH	<u>8.3</u>
Specific Gravity	<u>1.0060</u>
Resistivity ohm-mtr. @ 75 F	<u>0.8920</u>
Loss on Ignition, ppm	_____
Total Solids by Evap., ppm	_____
Organic acids, ppm	_____
Hardness as CaCO ₃ , ppm	_____
Sulfide	<u>ABSENT</u>
Mixed Oxides (Qualitative)	_____
Fluoride, ppm	_____
Silica, ppm	_____
Total Iron, ppm	<u>15</u>
Nitrates, ppm	_____
Phosphate, ppm	_____
_____	_____
_____	_____

REMARKS:

Commingled Luckey Ditch produced water for possible injection into Flash Federal.

Frederic S. Eisen

REPORTED BY:

Fred Eisen

CHEMICAL ENGINEERING SECTION

Copies to:

SUN 5434
SUN PRODUCTION COMPANY WATER ANALYSIS REPORT
PRODUCTION SERVICE LABORATORY

ANALYSIS NO. E-4985

FILE _____

Operator SUN E&P
Lease or Well PHILLIPS PET WATER SAMPLE
Formation _____
Perfs _____ To _____ ; T.D. _____
Method of Collecting Sample PHILLIPS INJECTION
H2O
Treatment _____
Date of last acid job _____
Total Prod. BOPD BWPD MCFPD

District DENVER CO.
Field _____
County _____
State WYO.
Collected by _____
Date 04/28/88 05/10/88
Collected Analyzed
Sample No. 61660
Analyst CRD PPI

Description of Sample 1 PINT GREY LIQUID

CONSTITUENTS	ppm
Sodium	<u>2500</u>
Calcium	<u>25</u>
Magnesium	<u>4</u>
Barium	<u>2</u>
Strontium	_____
Potassium	_____
Iron	<u>3</u>
Chloride	<u>3000</u>
Sulfate	<u>98</u>
Carbonate	<u>0</u>
Bicarbonate	<u>1440</u>
_____	_____
_____	_____
_____	_____
_____	_____
TOTAL DISSOLVED SOLIDS	<u>7072</u>

OTHER PROPERTIES	
pH	<u>8.2</u>
Specific Gravity	<u>1.0042</u>
Resistivity ohm-mtr. @ 75 F	<u>0.9920</u>
Loss on Ignition, ppm	_____
Total Solids by Evap., ppm	_____
Organic acids, ppm	_____
Hardness as CaCO ₃ , ppm	_____
Sulfide	<u>ABSENT</u>
Mixed Oxides (Qualitative)	_____
Fluoride, ppm	_____
Silica, ppm	_____
Total Iron, ppm	<u>5</u>
Nitrates, ppm	_____
Phosphate, ppm	_____
_____	_____
_____	_____

REMARKS:

Phillips disposal water for possible
injection into Flash Federal.

Frederic S. Eisen

REPORTED BY: Fred Eisen

CHEMICAL ENGINEERING SECTION
Copies to:

GEOLOGICAL DATA
FLASH FEDERAL #1

Top Dakota "E" Sand: 15,792' MD (15,181' TVD)

Injection Interval: 15,792'-15,822' MD (15,181'-15,211' TVD)

Logs Covering Injection Interval: Electromagnetic Wave Resistivity
Compensated Neutron Log (Cased Hole)
(No conventional open hole logs were run on this well because of
borehole problems).

Dakota "E" Sand Lithology: Sandstone, Light gray, fine to medium grain,
subround to subangular, with good porosity,
(average 16%).

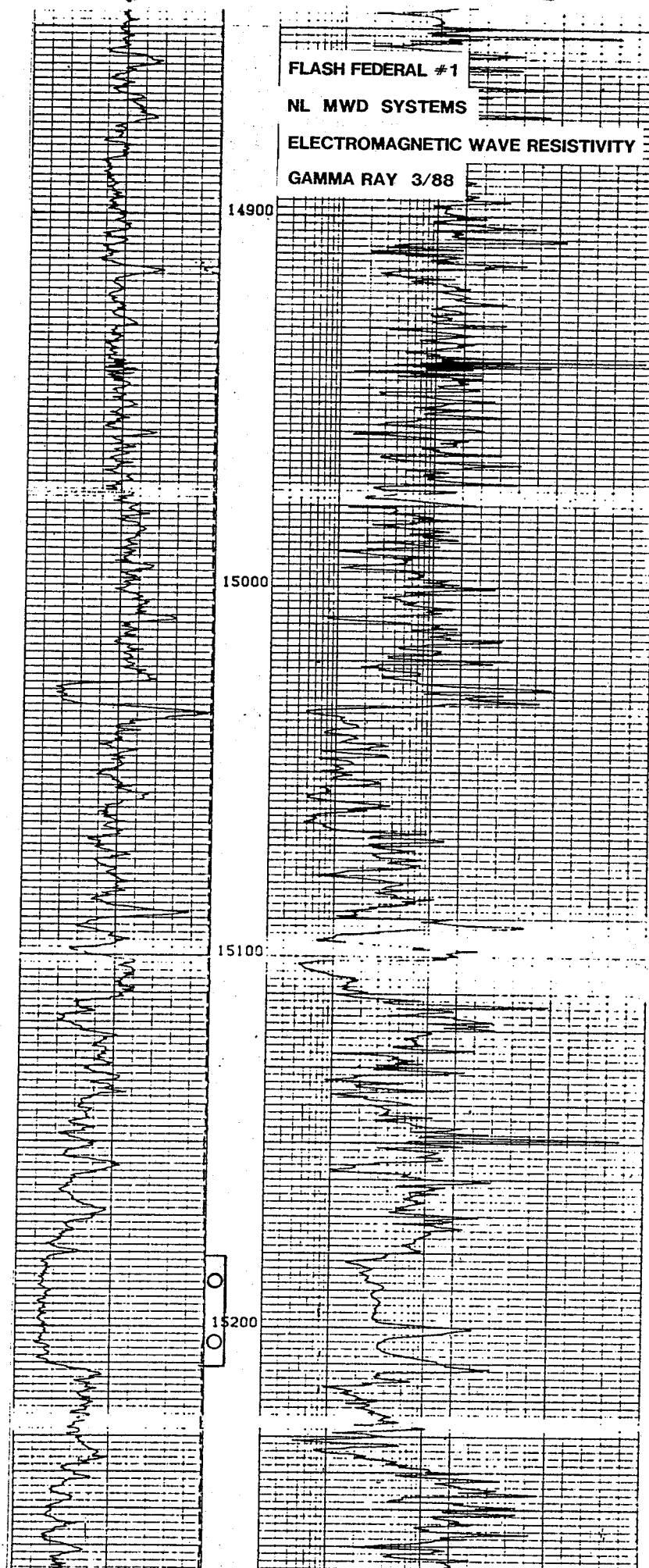
Beds above the Dakota formation consists of non-reservoir quality
sandstones and shales of the Mowry Formation. Beds below the Dakota
formation consist of shales, limestones and sandstones of the Morrison
formation, also non-reservoir quality rock.

The subject formation (Dakota) along with the adjacent beds of the Mowry
and Morrison, can be identified in wells south of the Flash Federal #1
(in the Bridger Lake Field) and north within the Luckey Ditch, Whiskey
Springs, Taylor Ranch and Henry Units.

Cause No. WD-103

Docket No. 88-014

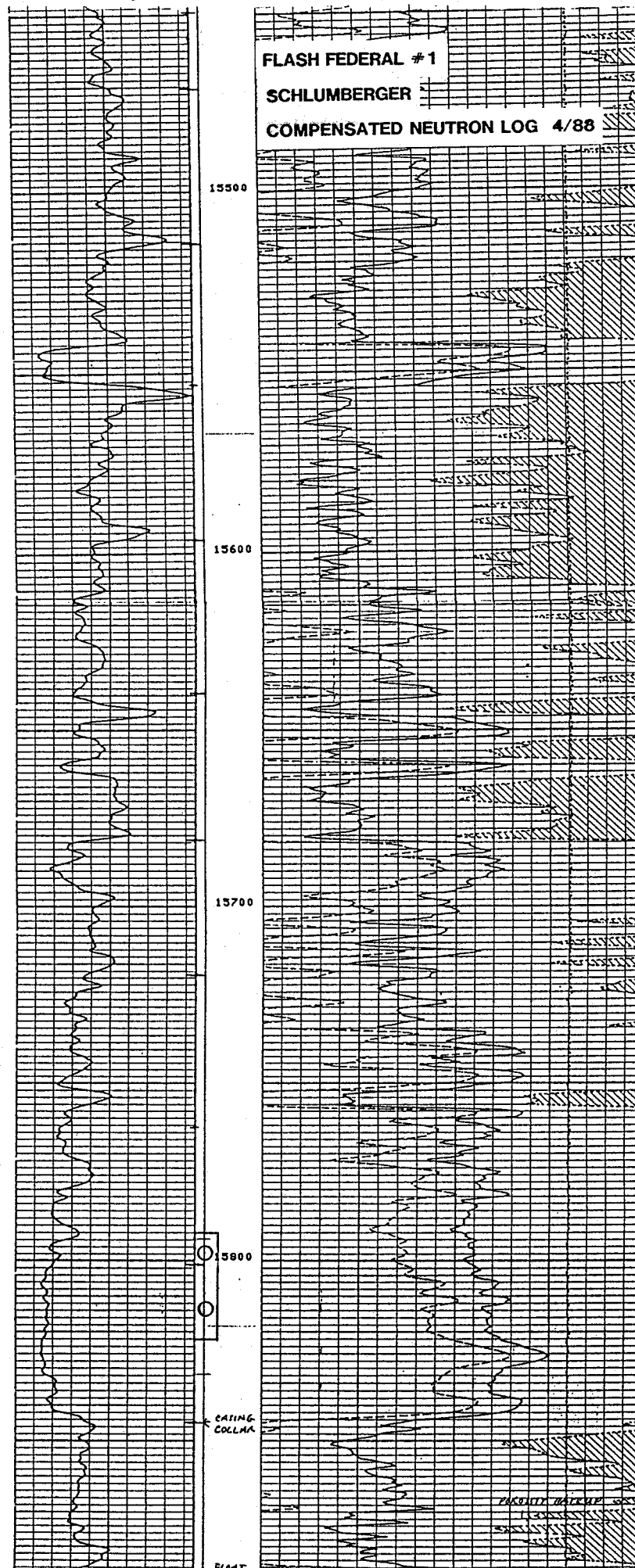
Exhibit No. 13



Cause No. WD-103

Docket No. 88-014

Exhibit No. 14



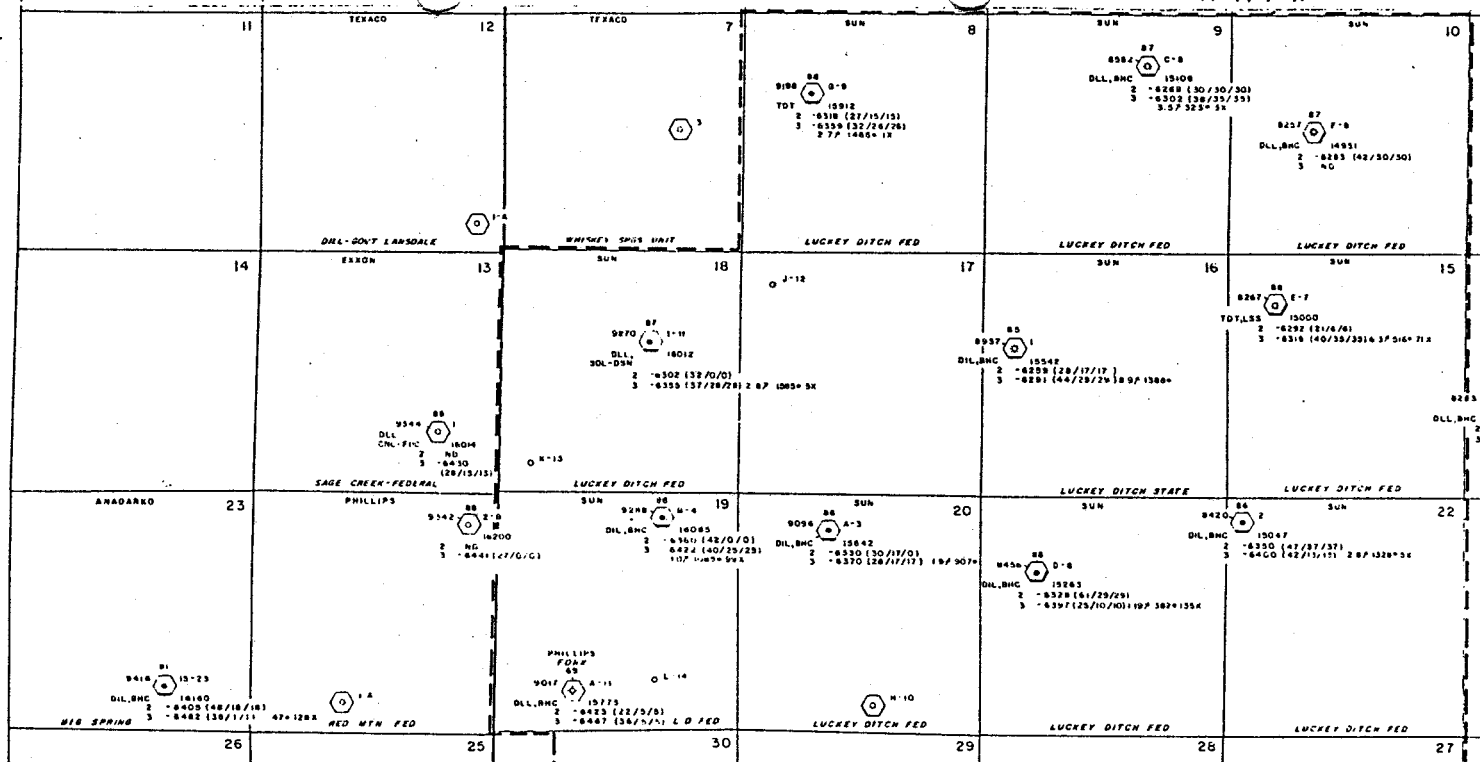


SUN	Sun Exploration and Production Company
	Rocky Mountain District
DAKOTA STUDY AREA	
TYPE: DATUM PRESSURES	
DATUM: -6300' 8 PSIG	
COUNTRY, STATE:	STATE: WYOMING
WELL: WAFBPT 1	DATE: 8/98
LOGGED BY: TOM ADAMS	DATE: 8/97
REVISED BY: TOM ADAMS	DATE: 2/99
CONTOUR INTERVAL:	SCALE: 1"=2000'

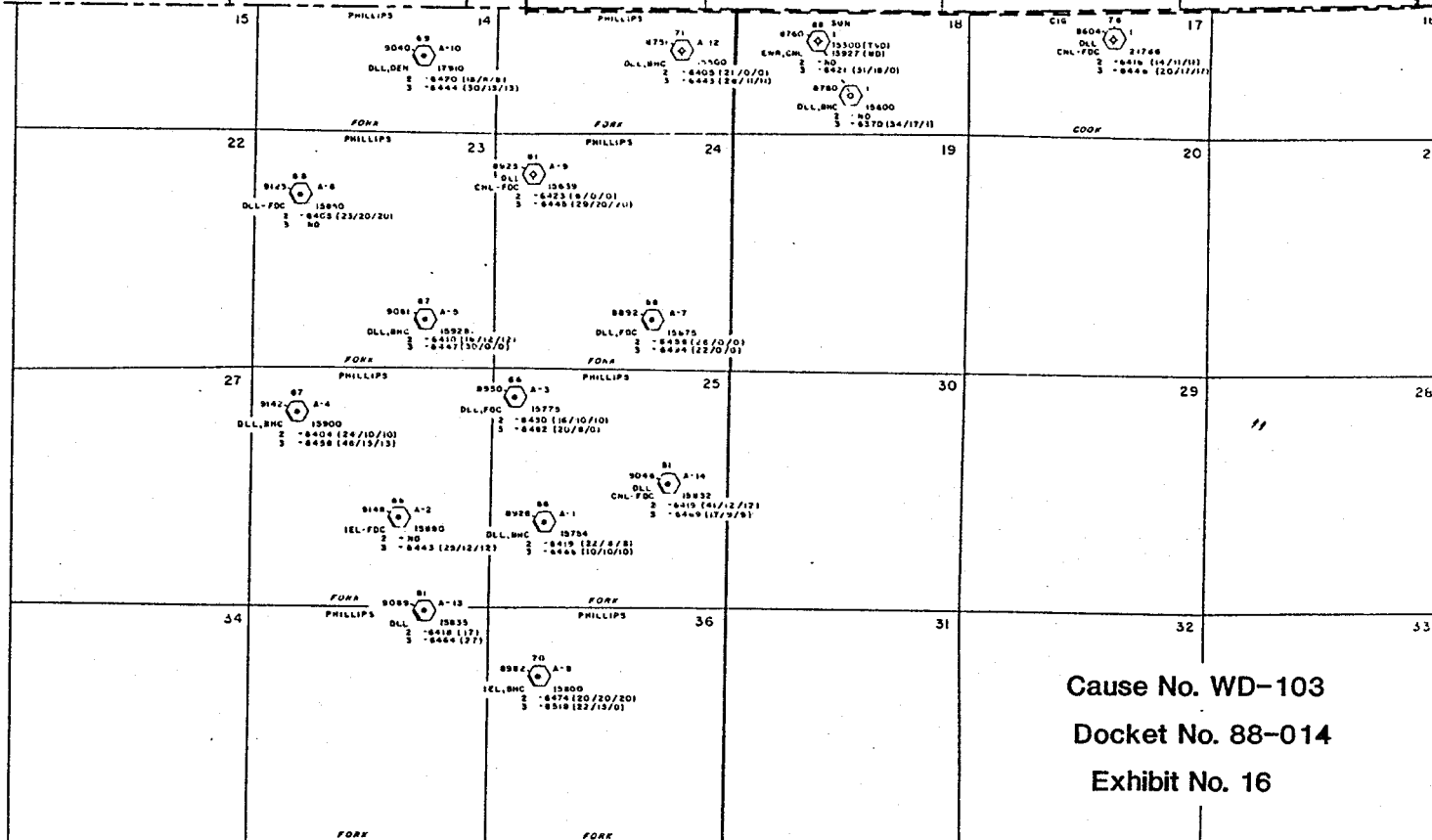
R 115 W

R 114 W

T 12 N



T 3 N



R 14 E

R 14 E

Cause No. WD-103

Docket No. 88-014

Exhibit No. 16

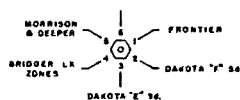
WELL DATA LOCATION

SUBSEA FORMATION TOP

WORKOVER DATE
COMPLETION DATE
ELEVATION WELL NUMBER
ZONE OPEN TO PRODUCTION
LOSS TOTAL DEPTH
PLUGGED OFF
PRODUCING ZONE
FORMATION - SUBSEA (GROSS ZONE/NET FT #/NET FT PAY) PROD/ PROD-PROD X

1-8000 (18/11/71) 2/ 300+ 200 X

F HMCFO
B BOPS
X BWPS



Sun Exploration and
Production Company
Rocky Mountain District

LUCKEY DITCH UNIT AREA

TYPE:
DATUM:
COUNTY: Uinta & Summit, STATE: Wyoming
BASE DRAFTED BY & DATE: J.L.M. 3/87, UPDATE: 3/88
GEOLOGY BY: , DATE:
REVISED BY: , DATE:
CONTOUR INTERVAL: , SCALE: 1"=2000'

CAUSE NO. WD-103
DOCKET NO. 88-014
EXHIBIT NO. 17

BRIDGER LAKE FIELD, SUMMIT, UTAH
July, '88 to Aug., '88 Measured Pressures:

WELL	ZONE	PRESSURE, PSIG	HOURS S.I.
A-2	A	3820	146
A-13	A,E	3522	164
A-14	D,E	5030	S.I.
INJECT.	A	4205	147

RED MOUNTAIN

#2	E	5114	71
----	---	------	----

Subject

WATER COMPATIBILITY: FLASH FEDERAL NO. 1, WILDCAT,
ROCKY MOUNTAIN DISTRICT

Interoffice
Correspondence

Date May 11, 1988
Location Technology Center
From Fred Eisen, Production Service Laboratory
To Rita Monroe Galvin
Denver

Attached are the results of analyses performed on two water samples received at the PSL on May 6, 1988. These waters were commingled produced water from Luckey Ditch and disposal water from Phillips. Also attached is a recent water analysis report for the Flash Federal No. 1. A compatibility evaluation was made for mixtures of these three waters.

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The Flash Federal No. 1 water analysis shows no barium and, therefore, exhibits no potential to form barium sulfate by itself. (Hopefully, barium has not already precipitated and dropped out of the water prior to the sampling point.) It does show a slight to moderate tendency for calcium carbonate scaling which is at a slightly lower level than that for the Luckey Ditch and Phillips waters.

To evaluate mixtures of all three waters, a 50/50 mixture of Luckey Ditch and Phillips waters was assumed. Since these waters are similar, modest changes in the ratio of these waters will not change the assessment significantly. Mixtures of the Flash Federal No. 1 water and this 50/50 mix does exhibit a slight barium sulfate scale tendency, but the level is approximately the same as for mixtures of just the Luckey Ditch and Phillips waters. In other words, adding the Flash Federal water does not significantly increase the potential to form barium sulfate. Similarly, mixtures of all three waters have a tendency to form calcium carbonate, but the inclusion of Flash Federal actually reduces the tendency slightly. Consequently, adding the Flash Federal water does not increase the potential to form calcium carbonate.

If you have any questions or wish to discuss this further, contact me at the PSL.

Fred Eisen

Fred Eisen
Chemical Engineering Section

wm

cc: Pete Dellinger
Pat Phelan

Tom Golden - Denver
Jim Schneider - Denver

Wayland Moody - NPIV 1155
File: RM-Wildcat

LABORATORY COPY

SUN 5434

SUN PRODUCTION COMPANY
PRODUCTION SERVICE LABORATORY

WATER ANALYSIS REPORT

ANALYSIS NO. E-4912

FILE _____

Operator SUN E & P *530740*
Lease or Well FLASH FEDERAL #1
Formation DAKOTA
Perfs 15792 To 15822 ; T.D. _____
Method of Collecting Sample FLASH FEDERAL 1
WELLHEAD
Treatment _____
Date of last acid job _____

Total Prod.	BOPD	BWPD	MCPPD

District ROCKY MOUNTAIN
Field WILDCAT
County SUMMIT
State UTAH
Collected by _____
Date 04/18/88 04/25/88
Collected Analyzed
Sample No. 53312
Analyst GRW PPI _____

Description of Sample 1 PINT CLOUDY LIQUID WITH BLACK SEDIMENT

CONSTITUENTS	ppm
Sodium	<u>3520</u>
Calcium	<u>36</u>
Magnesium	<u>4</u>
Barium	<u>0</u>
Strontium	_____
Potassium	_____
Iron	<u>56</u>
Chloride	<u>4540</u>
Sulfate	<u>276</u>
Carbonate	<u>0</u>
Bicarbonate	<u>1440</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
TOTAL DISSOLVED SOLIDS	<u>9872</u>

OTHER PROPERTIES	
pH	<u>7.4</u>
Specific Gravity	<u>1.0080</u>
Resistivity ohm-mtr. @ 75 F	<u>0.6622</u>
Loss on Ignition, ppm	_____
Total Solids by Evap., ppm	_____
Organic acids, ppm	_____
Hardness as CaCO ₃ , ppm	_____
Sulfide	<u>ABSENT</u>
Mixed Oxides (Qualitative)	_____
Fluoride, ppm	_____
Silica, ppm	_____
Total Iron, ppm	<u>849</u>
Nitrates, ppm	_____
Phosphate, ppm	_____
_____	_____
_____	_____

REMARKS:

Swab sample from new completion.
Analysis requested for record. This
sample may contain some residual
completion fluids but does appear to
be more representative of formation
water than the companion 4/16/88
sample.

Fred S. Eisen

REPORTED BY: Fred Eisen

CHEMICAL ENGINEERING SECTION

Copies to:

3260, 40, Bob Barman - NPIV 1125
Danny Bell - CCII 414
Chip Claiborne - Denver
Pete Dellinger
Rita Monroe Galvin - Denver
Tom Golden - Denver
Pat Phelan
Jim Schneider - Denver
Steve Stearns - Denver
File

LABORATORY COPY

SUN 5434

SUN PRODUCTION COMPANY

WATER ANALYSIS REPORT

ANALYSIS NO. E-4981

PRODUCTION SERVICE LABORATORY

FILE _____

Operator SUN E&P 605003Lease or Well LUCKEY DITCH

Formation _____

Perfs _____ To _____ ; T.D. _____

Method of Collecting Sample 400 BBL STORAGE

Treatment _____

Date of last acid job _____

Total Prod.

BOPD

BWPD

MCFPD

District DENVER CO.Field LUCKEY DITCHCounty UNITAState WYO.

Collected by _____

Date 04/26/8805/10/88

Collected

Analyzed

Sample No. 61291Analyst CRW PPI _____Description of Sample 1 PINT GREY LIQUID

CONSTITUENTS

ppm

Sodium 2670Calcium 26Magnesium 0Barium 1

Strontium _____

Potassium _____

Iron 2Chloride 3380Sulfate 123Carbonate 1Bicarbonate 1190TOTAL DISSOLVED SOLIDS 7393

OTHER PROPERTIES

pH 8.3Specific Gravity 1.0060Resistivity ohm-mtr. @ 75 F 0.8920

Loss on Ignition, ppm _____

Total Solids by Evap., ppm _____

Organic acids, ppm _____

Hardness as CaCO₃, ppm _____Sulfide ABSENT

Mixed Oxides (Qualitative) _____

Fluoride, ppm _____

Silica, ppm _____

Total Iron, ppm 15

Nitrates, ppm _____

Phosphate, ppm _____

REMARKS:

Commingled Luckey Ditch produced water for possible injection into Flash Federal.

Frederic S. Eisen

REPORTED BY: Fred Eisen

CHEMICAL ENGINEERING SECTION

Copies to:

SUN 5434

SUN PRODUCTION COMPANY
PRODUCTION SERVICE LABORATORY

WATER ANALYSIS REPORT

ANALYSIS NO. E-4985

FILE _____

Operator SUN E&PLease or Well PHILLIPS PET WATER SAMPLE

Formation _____

Perfs _____ To _____ ; T.D. _____

Method of Collecting Sample PHILLIPS INJECTION
H2O

Treatment _____

Date of last acid job _____

Total Prod.

BOPD

BWPD

MCFPD

District DENVER CO.

Field _____

County _____

State WYO.

Collected by _____

Date 04/28/8805/10/88

Collected

Analyzed

Sample No. 61660Analyst CRJ PPIDescription of Sample 1 PINT GREY LIQUID

CONSTITUENTS

ppm

Sodium	<u>2500</u>
Calcium	<u>25</u>
Magnesium	<u>4</u>
Barium	<u>2</u>
Strontium	_____
Potassium	_____
Iron	<u>3</u>
Chloride	<u>3000</u>
Sulfate	<u>98</u>
Carbonate	<u>0</u>
Bicarbonate	<u>1440</u>
_____	_____
_____	_____
_____	_____
_____	_____

TOTAL DISSOLVED SOLIDS

7072

OTHER PROPERTIES

pH	<u>8.2</u>
Specific Gravity	<u>1.0042</u>
Resistivity ohm-mtr. @ 75 F	<u>0.9920</u>
Loss on Ignition, ppm	_____
Total Solids by Evap., ppm	_____
Organic acids, ppm	_____
Hardness as CaCO ₃ , ppm	_____
Sulfide	<u>ABSENT</u>
Mixed Oxides (Qualitative)	_____
Fluoride, ppm	_____
Silica, ppm	_____
Total Iron, ppm	<u>5</u>
Nitrates, ppm	_____
Phosphate, ppm	_____
_____	_____
_____	_____

REMARKS:

Phillips disposal water for possible
injection into Flash Federal.Frederic S. EisenREPORTED BY: Fred Eisen

CHEMICAL ENGINEERING SECTION

Copies to:

 L.D. COMINGLED WATER MIXED WITH PHILLIPS WATER

A = L.D. COMINGLED

B = PHILLIPS

```

.....
NA :          2860          2950
CA :          24          22
MG :          3           3
BA :          1           2
SR :          0           0
CL :        3380        3000
SO4 :         123         98
CO3 :          1           0
HCO3:        1190        1440
pH :          8.3         8.2
  
```


 BARIUM SULFATE SCALING TENDENCY
 #####

%A	%B	TEMPERATURE (DEGREES F)	AMT OF BARIUM SULFATE FORMED (LB/1000 BBL)

0	100	75	0.78
25	75	75	0.66
50	50	75	0.53
75	25	75	0.41
100	0	75	0.27

0	100	100	0.66
25	75	100	0.55
50	50	100	0.43
75	25	100	0.30
100	0	100	0.18

0	100	125	0.22
25	75	125	0.13
50	50	125	0.04
75	25	125	-0.06
100	0	125	-0.17

0	100	150	-0.17
25	75	150	-0.24
50	50	150	-0.31
75	25	150	-0.40
100	0	150	-0.49

0	100	175	-0.25
25	75	175	-0.31
50	50	175	-0.38
75	25	175	-0.46
100	0	175	-0.55

0	100	200	-0.41
25	75	200	-0.46
50	50	200	-0.52
75	25	200	-0.59
100	0	200	-0.67

 L.D. COMINGLED WATER MIXED WITH PHILLIPS WATER

A = L.D. COMINGLED

B = PHILLIPS

 CALCIUM SULFATE SCALING TENDENCY

%A	%B	TEMPERATURE (DEGREES F)	AMT OF CALCIUM SULFATE FORMED (LB/1000 BBL)
----	----	----------------------------	--

*** TEMP NOT USED IN CASO4 CALCULATIONS ***

0	100	0 *	-1.57
25	75	0 *	-1.48
50	50	0 *	-1.40
75	25	0 *	-1.33
100	0	0 *	-1.26

CALCIUM CARBONATE SCALING TENDENCY

100 % L.D. COMINGLED WATER AND 0 % PHILLIPS WATER

** MIXED pH = 8.3 **
SCALING INDEX @ 75 FARENHEIT IS 0.87
SCALING INDEX @ 100 FARENHEIT IS 1.37
SCALING INDEX @ 125 FARENHEIT IS 1.97

75 % L.D. COMINGLED WATER AND 25 % PHILLIPS WATER

** MIXED pH = 8.3 **
SCALING INDEX @ 75 FARENHEIT IS 0.85
SCALING INDEX @ 100 FARENHEIT IS 1.35
SCALING INDEX @ 125 FARENHEIT IS 1.95

50 % L.D. COMINGLED WATER AND 50 % PHILLIPS WATER

** MIXED pH = 8.2 **
SCALING INDEX @ 75 FARENHEIT IS 0.84
SCALING INDEX @ 100 FARENHEIT IS 1.34
SCALING INDEX @ 125 FARENHEIT IS 1.94

25 % L.D. COMINGLED WATER AND 75 % PHILLIPS WATER

** MIXED pH = 8.2 **
SCALING INDEX @ 75 FARENHEIT IS 0.82
SCALING INDEX @ 100 FARENHEIT IS 1.32
SCALING INDEX @ 125 FARENHEIT IS 1.92

0 % L.D. COMINGLED WATER AND 100 % PHILLIPS WATER

** MIXED pH = 8.2 **
SCALING INDEX @ 75 FARENHEIT IS 0.81
SCALING INDEX @ 100 FARENHEIT IS 1.31
SCALING INDEX @ 125 FARENHEIT IS 1.91

 MIX PHIL/LUCKY WATER MIXED WITH FLASH FED #1 WATER

A = MIX PHIL/LUCKY

B = FLASH FED #1

```

.....
NA :          2905          3260
CA :          23           40
MG :          3            4
BA :          2            0
SR :          0            0
CL :          3190         4540
SO4 :         111          276
CO3 :          1            0
HCO3 :        1315         1440
pH :          8.3          7.4
  
```


 BARIUM SULFATE SCALING TENDENCY
 #####

%A %B		TEMPERATURE (DEGREES F)	AMT OF BARIUM SULFATE FORMED (LB/1000 BBL)

0	100	75	-0.14
25	75	75	0.13
50	50	75	0.39
75	25	75	0.63
100	0	75	0.83

0	100	100	-0.18
25	75	100	0.08
50	50	100	0.33
75	25	100	0.56
100	0	100	0.73

0	100	125	-0.34
25	75	125	-0.10
50	50	125	0.11
75	25	125	0.27
100	0	125	0.34

0	100	150	-0.48
25	75	150	-0.27
50	50	150	-0.10
75	25	150	0.01
100	0	150	-0.01

0	100	175	-0.51
25	75	175	-0.30
50	50	175	-0.14
75	25	175	-0.04
100	0	175	-0.08

0	100	200	-0.57
25	75	200	-0.37
50	50	200	-0.22
75	25	200	-0.14
100	0	200	-0.22

UIC CHECKLIST FOR APPLICATION APPROVAL

received 6/2/88

OPERATOR SUN E&P Company WELL NUMBER Flash Federal #1
 SEC. 18 T. 3N R. 15E COUNTY Summit
 API # 43-043-30282 T.A.

NEW WELL _____ DISPOSAL WELL ☒ ENHANCED RECOVERY WELL _____

- | | | |
|----------------------------------|---|----------|
| - Plat showing surface ownership | Yes <input checked="" type="checkbox"/> | No _____ |
| - Application forms complete | Yes <input checked="" type="checkbox"/> | No _____ |
| - Schematic of well bore | Yes <input checked="" type="checkbox"/> | No _____ |
| - Adequate geologic information | Yes <u>has been requested</u> | No _____ |
| - Rate and Pressure information | Yes <input checked="" type="checkbox"/> | No _____ |
| - Fluid source | Yes <input checked="" type="checkbox"/> | No _____ |
| - Analysis of formation fluid | Yes <input checked="" type="checkbox"/> | No _____ |
| - Analysis of injection fluid | Yes <input checked="" type="checkbox"/> | No _____ |
| - USDW information | Yes <u>aquifer exemption needed</u> | No _____ |
| - Mechanical integrity test | Yes _____ | No _____ |

Comments: Max Rate = 2000 BPD MAX Pressure = 3000 PSI

Injection perfs at 15792-15822 Dakota

Water analysis from the Flash Federal indicate a
TDS of 9872 ppm (Aquifer Exemption needed)

* Frac Data is theoretical using .75 psi/ft.
from Service Company data for the Dakota

Reveiwed by D. J. J. J.

(over)

no wells in area
of review

Additional geologic ^{data} is required
to evaluate what the structure looks like.

Wells located in Wyoming to the North
and also in the Bridger Lake field of
Utah are producing oil from perforations
in the Dakota

*
Green River ^{Tops} 3900'

Fort Union 7080'

~~Mesa Verde~~

Ricky Morgan of Sun E+P ~~will~~ send additional
Geologic Data.



RECEIVED
JUN 2 1988

DIVISION OF
OIL, GAS & MINING

**Sun Exploration and
Production Company**

Four NorthPark East
5656 Blackwell
P O Box 2880
Dallas TX 75221-2880
214 890 6000

June 1, 1988

AIRBORNE EXPRESS MAIL

Ms. Dianne R. Nielson, Director
Division of Oil, Gas and Mining
3 Triad Center, Suite 350
355 West North Temple
Salt Lake City, UT 84180-1203

RE: Application for Water Disposal Well; Flash Federal No. 1;
Summit County, Utah

Dear Ms. Nielson:

Please find enclosed an application for conversion of the captioned well to a water disposal well for filing with the Commission. Applicant requests that the herein application be set for hearing on the docket for the next regularly scheduled meeting. However, in the event no objections to the granting of this Application are timely filed, Applicant requests that this Application be approved administratively.

If any additional information is required, please contact me.

Very truly yours,

R. Mark Galloway
Conservation Attorney

RMG:ldh

Enclosure

LIST OF ATTACHMENTS

- I. FORM DOGM-UIC-1
- II. PLAT OF SURFACE OWNERSHIP
- III. PLAT W/1/2 MILE RADIUS AROUND BOTTOM HOLE LOCATION
- IV. PROPOSED INJECTION PROGRAM
- V. COMPLETION DATA
- VI. WELLBORE SKETCH
- VII. GEOLOGICAL DATA
- VIII. ELECTROMAGNETIC WAVE RESISTIVITY LOG
- IX. COMPENSATED NEUTRON LOG
- X. CEMENT BOND LOG
- XI. MAXIMUM INJECTION PRESSURE CALCULATIONS
- XII. WATER ANALYSIS AND COMPATIBILITY REPORTS

ATTACHMENT I.

FORM DOGM-UIC-1

APPLICATION FOR INJECTION WELL

Operator: Sun Exploration & Production Company Telephone: (303) 696-3500

Address: P.O. Box 5940 T.A.

City: Denver State: Colorado Zip: 80217

Well no.: Flash Federal #1 Field or Unit name: Wildcat

Sec.: 18 Twp.: 3N Rng.: 15E County: Summit Lease no. O&G 8701

	<u>YES</u>	<u>NO</u>
Is this application for expansion of an existing project?.....	<u> </u>	<u>X</u>
Will the proposed well be used for: Enhanced recovery?.....	<u> </u>	<u> </u>
Disposal?.....	<u>X</u>	<u> </u>
Storage?.....	<u> </u>	<u> </u>
Is this application for a new well to be drilled?.....	<u> </u>	<u>X</u>
Has a casing test been performed for an existing well?.....	<u>X</u>	<u> </u>
(If yes, date of test: <u>4-15-88</u>)		

Injection interval: from 15,792' to 15,822'

Maximum injection: rate 2000 BPD pressure 3000 psig

Injection zone contains oil, gas or X fresh water within 1/2 mile.

Additional information as required by Rule 502 should accompany this form.

I hereby certify that the foregoing is true and correct to the best of my knowledge:

Signed:  Title: Pror.&Prod.Acctg.Supvr. Date: 5-17-88

(This space for DOGM approval)

Approved by: _____ Title: _____ Date: _____



RECEIVED
JUN 8 1988

DIVISION OF
OIL, GAS & MINING

**Sun Exploration and
Production Company**
Four NorthPark East
5656 Blackwell
P O Box 2880
Dallas TX 75221-2880
214 890 6000

June 6, 1988

Mr. Dan Jarvis
Division of Oil, Gas and Mining
3 Triad Center, Suite 350
355 West North Temple
Salt Lake City, UT 84180-1203

RE: Application for Water
Disposal Well
Flash Federal No. 1
Summit County, Utah

Dear Mr. Jarvis:

As per our telephone conversation earlier today, enclosed please find an Amended Affidavit to be included with the above referenced Application which was sent last Wednesday, June 1st.

I apologize for any inconvenience this may cause and am most appreciative of your help in this matter.

Yours very truly,
RMG
R. Mark Galloway

R. Mark Galloway
Conservation Attorney

RMG:vak
Enclosure

RECEIVED
JUN 8 1988

AMENDED AFFIDAVIT

DIVISION OF
OIL, GAS & MINING

Application of Sun Exploration and Production Company for permission to convert a well for water disposal at the following location in Summit County, Utah:

Bottomhole Location

Flash Federal
Well No. 1

3184' FSL & 1832' FWL
Sec. 18-T3N-R15E

900' FSL & 2600' FWL
Section 18-T3N-R15E

AFFIDAVIT

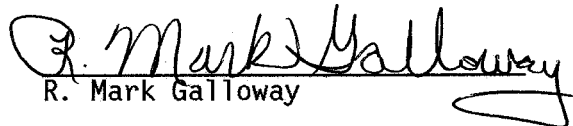
STATE OF TEXAS)
)
COUNTY OF DALLAS) SS

I, R. Mark Galloway, being of legal age, and after first being duly sworn, do upon oath state the following:

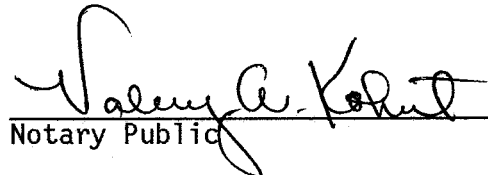
That the named corporation and individuals set forth on Attachment "A" hereto, constitute all of the owners (as defined in the Utah Conservation Laws) within a one-half ($\frac{1}{2}$) mile radius of Sun's Flash Federal Well No. 1 as described in the Application to which this Affidavit is attached.

That the addresses listed after the names of the owners set forth on Attachment "A" constitute the last mailing addresses of said owners as far as the Applicant, Sun Exploration and Production Company, and the undersigned have been able to ascertain.

That on the 1st day of June, 1988, Applicant caused a full and true copy of the Application to which this Affidavit is attached to be mailed to the owners set forth on Attachment "A" by certified mail, return receipt requested.


R. Mark Galloway

Subscribed and sworn to before me this 6th day of June, 1988.


Notary Public

My Commission Expires: January 16, 1989

AFFIDAVIT

Application of Sun Exploration and Production Company for permission to ~~drill~~^{construct} a well for water disposal at the following location in Summit County, Utah:

Bottomhole Location

Flash Federal
Well No. 1

3184' FSL & 1832' FWL
Sec. 18-T3N-R15E

900' FSL & 2600' FWL
Sec. 15-T33N-R86W
18 T3N - 15 E

AFFIDAVIT

STATE OF TEXAS)
)
COUNTY OF DALLAS)

SS

*corrections as per
telephone conversation with
MARK Galloway on 6/6/88 at
8:40 am.*

I, R. Mark Galloway, being of legal age, and after first being duly sworn, do upon oath state the following:

That the named corporation and individuals set forth on Attachment "A" hereto, constitute all of the owners (as defined in the Utah Conservation Laws) within a one-half ($\frac{1}{2}$) mile radius of Sun's Flash Federal Well No. 1 as described in the Application to which this Affidavit is attached.

That the addresses listed after the names of the owners set forth on Attachment "A" constitute the last mailing addresses of said owners as far as the Applicant, Sun Exploration and Production Company, and the undersigned have been able to ascertain.

That on the 1st day of June, 1988, Applicant caused a full and true copy of the Application to which this Affidavit is attached to be mailed to the owners set forth on Attachment "A" by certified mail, return receipt requested.

R. Mark Galloway
R. Mark Galloway

Subscribed and sworn to before me this 1st day of June, 1988.

Leslie D. Harding
Notary Public

My Commission Expires: December 21, 1988

ATTACHMENT "A"

The following lands listed below with their respective mineral interest and working interest owners, lie within 1/2 mile radius of either the surface location or the bottom hole location for the Flash Federal #1 well:

<u>Description</u>	<u>Mineral Owners</u>	<u>Working Interest Owners</u>
1. <u>T3N-R14E</u> Sec. 13: Lot 1, E $\frac{1}{2}$ SE $\frac{1}{4}$	U.S.A.*	Phillips Petroleum Co. 8055 E. Tufts Ave. Pkwy. Denver, CO 80237-2898
<u>T3N-R15E</u> Sec. 18: Lots 1-5, E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ Sec. 19: Lot 1, NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ Summit County, Utah		
2. <u>T3N-R15E</u> Sec. 18: Lot 6 Summit County, Utah	U.S.A.*	Union Oil Company of California P. O. Box 2620 Casper, WY 82602-2620
3. <u>T12N-R114W</u> Sec. 20: S $\frac{1}{2}$ S $\frac{1}{2}$ Sec. 29: Lots 1-4 Sec. 30: Lot 1 Uinta County, Wyoming	U.S.A.*	A. Sun Operating Limited Partnership B. Robert J. Hewitt One O'Connor Plaza Suite 1100 Victoria, TX 77901 C. General Atlantic Energy Corp. 410 17th St., Suite 1400 Denver, CO 80202 D. Fortune Oil Ltd. 1245 E. Brickyard Rd., Ste. 30 Salt Lake City, UT 84106 E. Chieftain International, Inc. 1201 Toronto Dominion Tower Edmonton Centre Edmonton, Alberta, Canada T5J 2Z1

*Bureau of Land Management
P. O. Box 1828
2515 Warren Ave.
Cheyenne, WY 82001

ATTACHMENT "A" (cont'd.)

SURFACE OWNERS

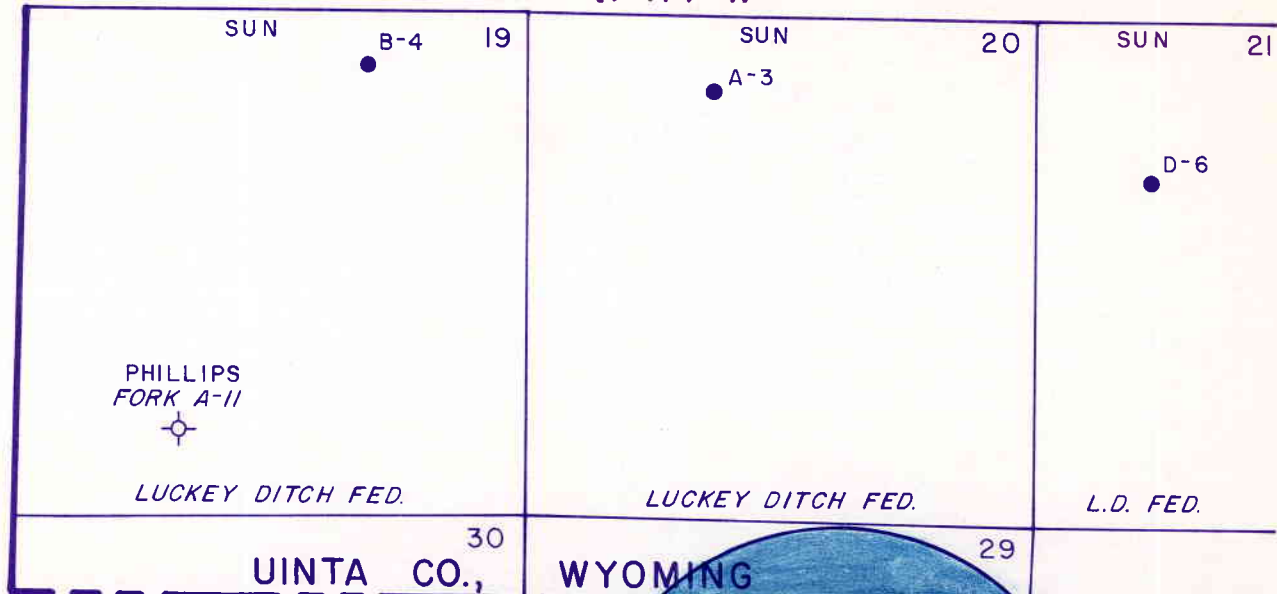
United States
Bureau of Land Management
2515 Warren Avenue
P. O. Box 1828
Cheyenne, WY 82001

United States Forest Service
Kemerer Ranger District
P. O. Box 31
Kemerer, WY 83101

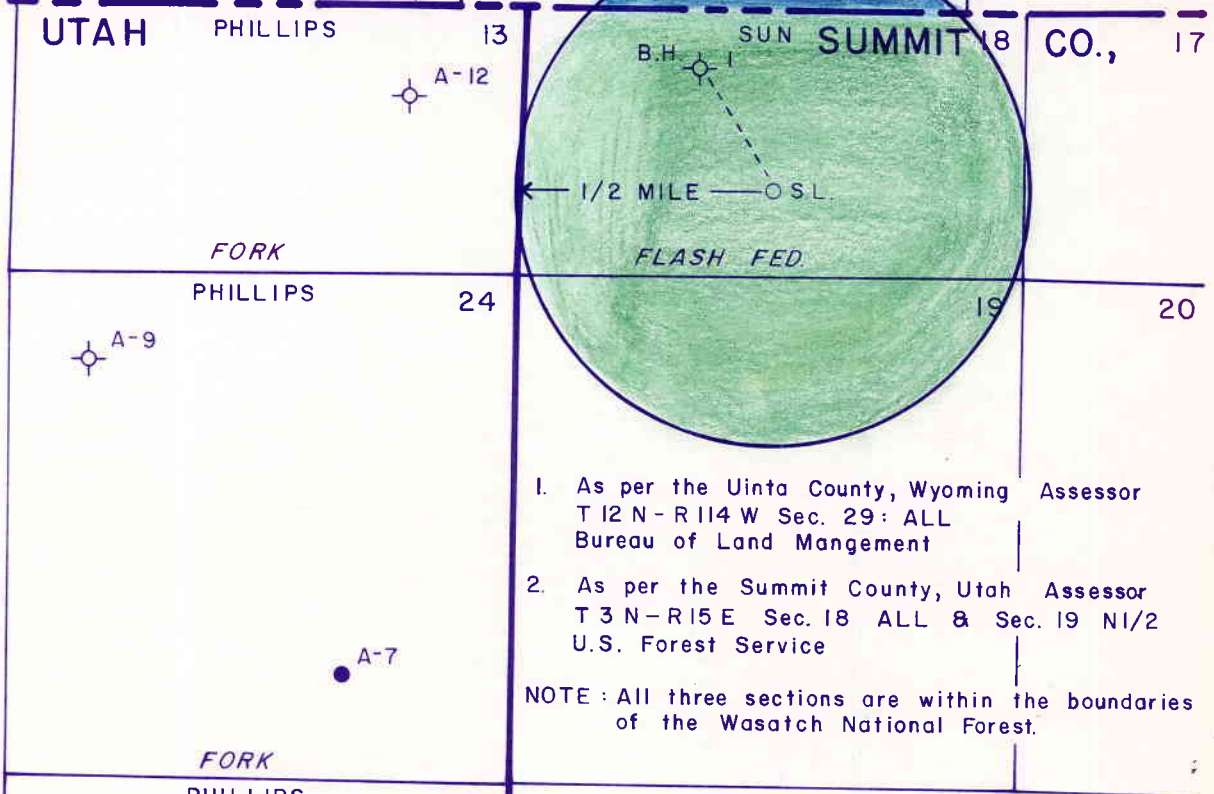
ATTACHMENT II.

PLAT OF SURFACE OWNERSHIP

R 114 W



T
12
N



T
3
N

1. As per the Uinta County, Wyoming Assessor
T 12 N - R 114 W Sec. 29: ALL
Bureau of Land Management
2. As per the Summit County, Utah Assessor
T 3 N - R 15 E Sec. 18 ALL & Sec. 19 N 1/2
U.S. Forest Service

NOTE: All three sections are within the boundaries
of the Wasatch National Forest.

R 15 E

SUN

Sun Exploration and
Production Company
Rocky Mountain District

LUCKEY DITCH - FLASH
UINTA CO., WYOMING
SUMMIT CO., UTAH
SURFACE OWNERSHIP
WITHIN 1 MILE DIAMETER

SCALE: 1" = 2000'

DATE: 4/88

 BUREAU OF
LAND MANAGEMENT
 U.S. FOREST
SERVICE

FORK

R 14 E

ATTACHMENT III.

PLAT W/ 1/2 MILE RADIUS AROUND
BOTTOM HOLE LOCATION

SUN B-4 19

SUN A-3 20

SUN D-6 21

PHILLIPS FORK A-11

LUCKEY DITCH FED.

LUCKEY DITCH FED.

L.D. FED.

30 29

UINTEA CO., WYOMING

UTAH PHILLIPS 13

SUN SUMMIT 18 CO., 17

A-12 B.H. 1/2 MILE O.S.L.

FLASH FED.

24 19 20

PHILLIPS FORK

A-9 A-7

25

PHILLIPS FORK

A-3 A-14 A-1

R 15 E

SUN Sun Exploration and Production Company Rocky Mountain District

LUCKEY DITCH-FLASH
UINTEA CO., WYOMING
SUMMIT CO., UTAH

SCALE: 1" = 2000' DATE: 4/88

R 14 E

T
3
N

**Sun Exploration and
Production Company
Rocky Mountain District**

LUCKEY DITCH-FLASH
 UINTEA CO., WYOMING
 SUMMIT CO., UTAH

SCALE: 1" = 2000' DATE: 4/88

ATTACHMENT IV.

PROPOSED INJECTION PROGRAM

Flash Federal #1

Proposed Injection Program

Sun is currently producing an average of 450 BWPB from the Dakota formation in the Luckey Ditch Field in Uinta County, Wyoming. Presently this water is being trucked to a disposal well owned by Phillips. The volume of produced water has increased significantly due to the recent surge of development in this area. The capacity of Phillips disposal well has become inadequate and there are also some downhole mechanical problems. Therefore, Sun proposes to convert the Flash Federal #1 to a disposal well.

As previously stated, the water to be injected is produced from the Dakota formation in the Luckey Ditch Unit as well as Phillips Bridger Lake Unit located in Summit County, Utah. The total estimated daily average injection rate will be 800 BWPB; 450 BPD from Sun and 350 BPD from Phillips. The maximum anticipated injection rate is 2000 BWPB. The initial injection pressure is expected to be 1000 psi. Maximum injection pressure should not exceed 3000 psi.

Equipment for handling the water injected will be installed at the Flash Federal #1. This will include 3 tanks, an injection pump, and metering equipment. Electric power will be extended to the site if available. All water will be chemically treated as necessary and filtered prior to being injected. The tubing and annulus pressures and metered volumes will be monitored on a daily basis.

Initially, water from Sun's Luckey Ditch Unit will be trucked to the disposal well from the central battery in Section 16, T12N, R114W. However, Sun intends to install an underground water transfer line to eliminate trucking charges. Phillips also plans to truck water to the disposal well from their tank battery in Section 23, T3N, R14E, Summit County, Utah.

ATTACHMENT V.

COMPLETION DATA

FLASH FEDERAL #1

LOCATION: 900' FSL, 2600' FWL, SECTION 18, T3N, R15E, SUMMIT COUNTY, UTAH

ELEVATIONS: GL - 8,733' KB - 8,760'

SPUDDED: 8-30-87

COMPLETED: 4-25-88

TD: 15,983'

PBTD: 15,927'

PERFORATIONS: 15,792'-15,822' DAKOTA SAND

CASING DATA: 9-5/8", 40#, K-55, LT&C
CS-5007', FC-4923, DV TOOL-2021'
CMTD 1ST STAGE W/1000 SX CMT, DID NOT BUMP PLUG, OPEN
DV TOOL AND CIRC 4 HRS., NO CMT TO SURF.
CMTD 2ND STAGE W/1400 SX CMT, CIRC 80 SX TO SURF.
DRILLED OUT AND PRESS TEST CSG TO 1500 PSI.

5-1/2", 20 & 23#, N-80, LTC & BTC
CS-15,983', FC-15,893'
CMTD W/700 SX CL-H CMT, FP 1800-2100.
TOC @ 14,670'

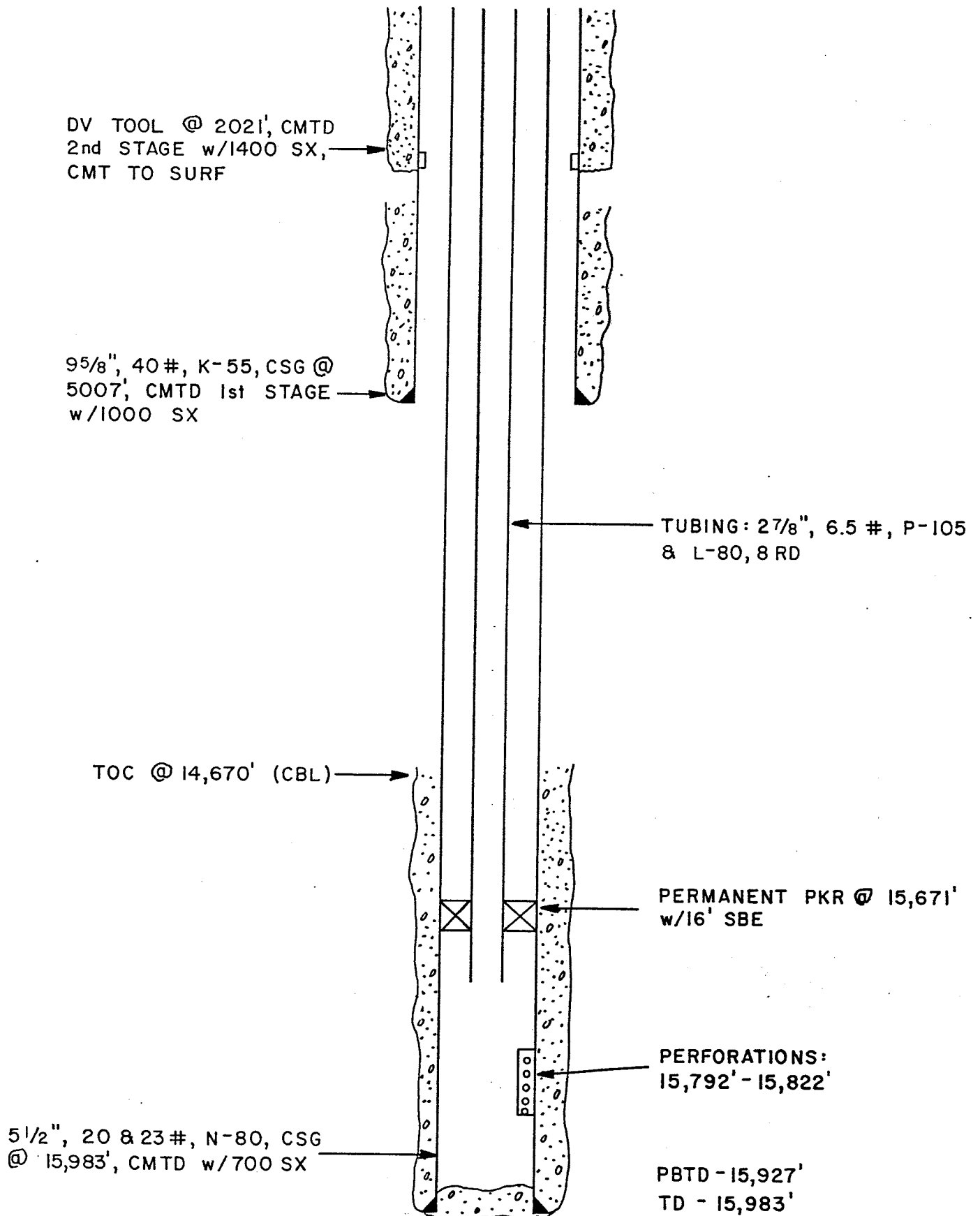
NOTE: BOTTOM HOLE LOCATION - 3184' FSL, 1832' FWL
ALL DEPTHS ARE MEASURED DEPTHS.

The Flash Federal #1 was side-tracked and drilled to a bottom hole location of 3184' FSL, 1832' FWL, Section 18. A permanent packer was set at 15,671' by wireline. Tubing was run in the hole and tested to 7000 psi. The annulus was circulated with 3% KCL water containing a corrosion inhibitor. After landing the tubing into the packer seal bore, the annulus was tested to 2000 psi. The Dakota was perforated from 15,792' to 15,822'. No hydrocarbons were recovered from this interval.

ATTACHMENT VI.

WELLBORE SKETCH

FLASH FEDERAL #1



ATTACHMENT VII.

GEOLOGICAL DATA

GEOLOGICAL DATA
FLASH FEDERAL #1

Top Dakota "E" Sand: 15,792' MD (15,181' TVD)

Injection Interval: 15,792'-15,822' ND (15,181'-15,211' TVD)

Logs Covering Injection Interval: Electromagnetic Wave Resistivity
Compensated Neutron Log (Cased Hole)
(No conventional open hole logs were run on this well because of
borehole problems).

Dakota "E" Sand Lithology: Sandstone, light gray, fine to medium grain,
subround to subangular, with good porosity,
(average 16%).

Beds above the Dakota formation consists of non-reservoir quality
sandstones and shales of the Mowry Formation. Beds below the Dakota
formation consist of shales, limestones and sandstones of the Morrison
formation, also non-reservoir quality rock.

The subject formation (Dakota along with the adjacent beds of the Mowry
and Morrison can be identified in wells south of the Flash Federal #1
(in the Bridger Lake Field) and North within the Luckey Ditch, Whiskey
Springs, Taylor Ranch and Henry Units.

ATTACHMENT VIII.

ELECTROMAGNETIC WAVE RESISTIVITY LOG

15100

FLASH FEDERAL #1

NL MWD SYSTEMS

ELECTROMAGNETIC WAVE RESISTIVITY

GAMMA RAY 3/88

15200

GAMMA RAY

R.O.P.

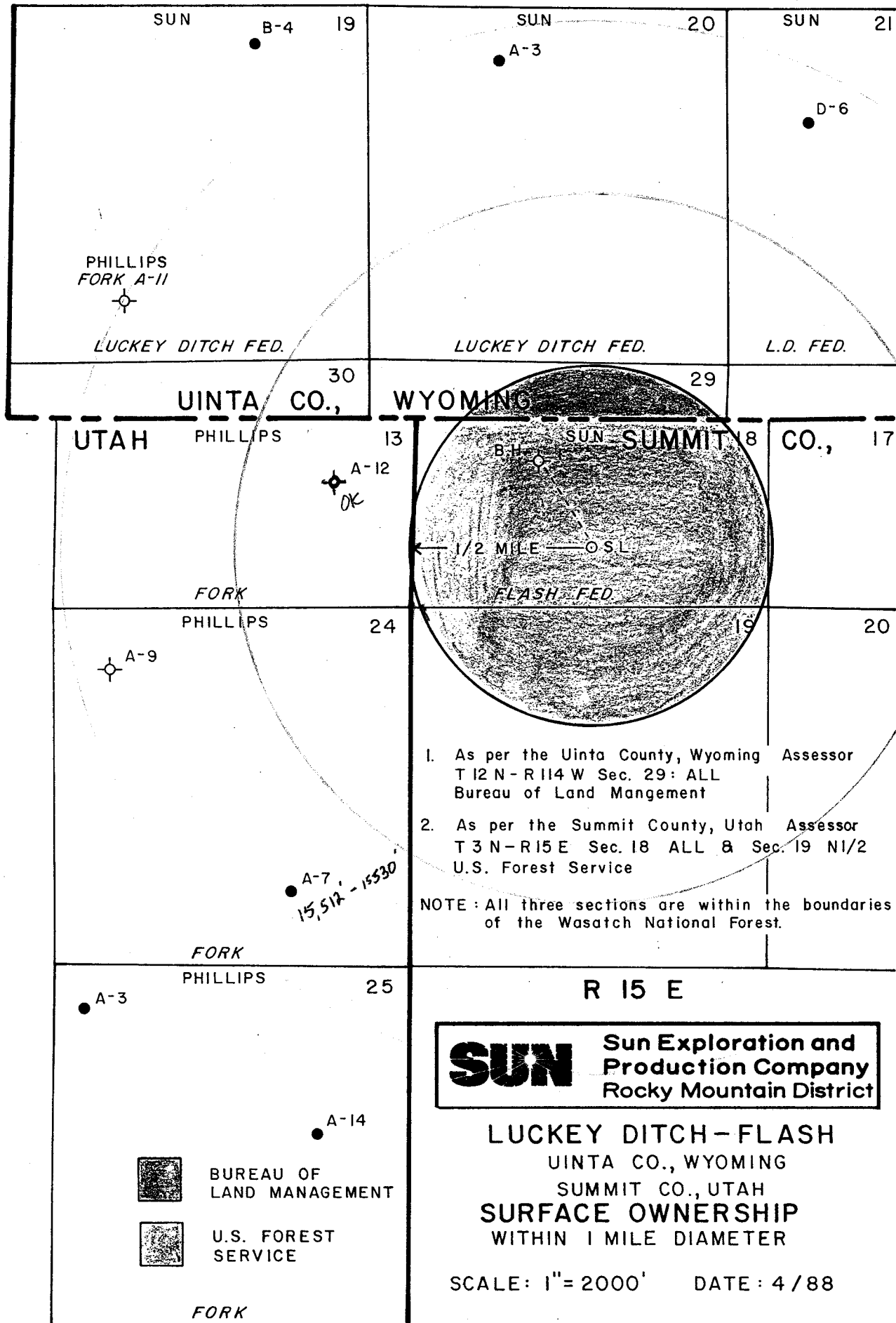
EWR

TD

ATTACHMENT IX.

COMPENSATED NEUTRON LOG

R 114 W



FLASH FEDERAL #1

SCHLUMBERGER
COMPENSATED NEUTRON LOG 4/88

15800

CASING
COLLAR

FLOAT
COLLAR

GAMMA RAY

15900
FR GR

FRONL
TD

POROSITY BACKUP

15850

TENSION

NEUTRON
POROSITY

NEUTRON
POROSITY

ATTACHMENT X.

CEMENT BOND LOG

FLASH FEDERAL #1

SCHLUMBERGER

CEMENT BOND LOG

4/12/88

15800

CASING
COLLAR

GAMMA GAT

TENSION

3-FT TRAVEL
TIME

FRCL

FRGR

15900

FK CBL

TD

2-FT AMPLITUDE

AMPLITUDE

ATTACHMENT XI.

MAXIMUM INJECTION PRESSURE CALCULATIONS

MAXIMUM INJECTION PRESSURE CALCULATIONS
FLASH FEDERAL #1

I. BOTTOM HOLE FRACTURE PRESSURE

FG = 0.75 psi/ft based on average service company data for the
Dakota in the surrounding area.

$$\begin{aligned}\text{BHFP} &= \text{FG} \times \text{Depth} \\ &= 0.75 \times 15807'\end{aligned}$$

$$\text{BHFP} = 11855 \text{ psi}$$

II. MAXIMUM SURFACE INJECTION PRESSURE

$$\text{SWHP} = \text{BHFP} - \text{Ph} + \text{Ppipe} + \text{Pperf}$$

$$\text{Ph} = \text{Density (lb/gal)} \times \text{Depth (ft)} \times 0.052$$

$$\text{Ph} = 8.397 \times 15,807' \times 0.052$$

$$\text{Ph} = 6902 \text{ psi}$$

$$\text{Ppipe} = 21 \text{ psi/1000'} \text{ (assuming instantaneous rate of 2000 BPD)}$$

$$\text{Ppipe} = 330 \text{ psi}$$

$$\text{Pperf} = 0 \text{ psi}$$

$$\text{SWHP} = 11855 - 6902 + 330 + 0$$

$$\text{SWHP} = 5283 \text{ psi}$$

BHFP - Bottom Hole Frac Pressure
FG - Frac Gradient
Ph - Hydrostatic Pressure
Pperf - Perforation Friction
Ppipe - Pipe Friction

ATTACHMENT XII.

WATER ANALYSIS AND COMPATIBILITY REPORTS



Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

June 14, 1988

Mr. R. Mark Galloway, Attorney
Sun Exploration and Production Company
Four North Park East
5656 Blackwell
P.O. Box 2880
Dallas, TX 75221-2880

Dear Mr. Galloway:

Re: Water Disposal Well Application, Flash Federal No. 1 Well,
Sec. 18, T. 3 N., R. 15 E., Summit County, Utah

The Division has reviewed the referenced application in accordance with the Oil and Gas Conservation General Rules specifically R615-5 Underground Injection Control of Recovery Operations and Class II Injection Wells. We have determined that due to the quality of the water in the proposed injection interval, approval of this application cannot be granted at this time.

It will be necessary for Sun to seek an aquifer exemption in accordance with R615-5-4. Sun should submit a petition to the Board of Oil, Gas and Mining requesting a hearing in this matter. The petition should be submitted in accordance with the Board's Procedural Rules (copy enclosed). The timely submittal of such a petition would probably allow for the matter to be scheduled for the regular monthly Board hearing on July 28, 1988.

If you have any questions concerning this matter, please call.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Gil Hunt'. The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Gil Hunt
Environmental/Geological Supervisor

Enclosure
tc
0310U

RECEIVED

JUL 8 1988

DIV. OIL, GAS, MINING

BEFORE THE BOARD OF OIL, GAS AND MINING
DEPARTMENT OF NATURAL RESOURCES
STATE OF UTAH

-----ooOoo-----

In the Matter of the Request :
for Agency Action of Sun
Exploration and Production : Docket No. 88-014
Company for an Aquifer :
Exemption and also for :
Authorization of the Conversion : Cause No. WDP-103
to a Water Disposal Well for :
the Flash Federal No. 1 Well, :
Section 18, Township 3 North, :
Range 15 East, Summit County, :
Utah :

-----ooOoo-----

Applicant, Sun Exploration and Production Company ("Sun"), duly authorized to do business in the State of Utah, hereby submits this Request for Agency Action for the authorization of the conversion of the Flash Federal No. 1 Well located in Section 18, Township 3 North, Range 15 East, S.L.M., in Summit County (the "Well"), into a water disposal well and the granting of an aquifer exemption for the Dakota formation in the Well, pursuant to Rules R615-5-3 and R615-5-4 of the Department of Natural Resources, Oil and Gas Conservation General Rules, and pursuant to § 40-6-5, Utah Code Annotated, 1953, as amended. In support of said Request for Agency Action, Sun submits the following:

1. Sun is the operator of the federally administered Luckey Ditch Unit located in Uinta County, Wyoming, said unit lands generally being located in Township 12 North, Range 114 West, 6th P.M., bordered on the south by the Utah-Wyoming state line.
2. Pursuant to R615-5-3, Sun filed an application for approval of the Flash Federal No. 1 Well as an injection well on June 1, 1988. By letter dated June 14, 1988, the State of Utah, Natural Resources, Oil, Gas and Mining, informed Sun that the application for approval could not be granted until an aquifer exemption were granted pursuant to R615-5-4.
3. Sun is currently producing an average of 450 barrels of water per day from the Dakota formation in the Luckey Ditch field, Uinta County, Wyoming. Presently, this water is being trucked to a disposal well owned by Phillips Petroleum Co.

However, the volume of water produced has increased significantly due to recent increases in development in the area. The capacity of the Phillips disposal well has become inadequate to meet the increased capacity of water production; Sun proposes, therefore, to convert the Well to a disposal well.

4. The Flash Federal No. 1 Well is located in Section 18, Township 3 North, Range 15 East, S.L.M., in Summit County, Utah. The surface location of the Well is 900 feet from the south line and 2,600 feet from the west line of Section 18; the bottom hole location is 3,184 feet from the south line and 1,832 feet from the west line of Section 18. Attached to this Application as Exhibit "A" is a map showing the location of the Well and the surrounding properties.

5. The water to be injected into the Well will be produced from the Dakota formation in the Luckey Ditch unit and from the Phillips Bridger Lake unit which is located south of the Utah-Wyoming border in Summit County, Utah. The total estimated daily average injection rate would be 800 BWPD. Approximately 450 BPD would come from Sun and the remaining 350 BPD would be produced from Phillips' production. The maximum anticipated injection rate is 2,000 BWPD. The initial injection pressure is expected to 1,000 psi. Maximum injection pressure should not exceed 3,000 psi. The injection interval in the well would be from 15,792 feet to 15,822 feet below the surface of the earth.

6. Equipment for handling the water injected will be installed at the Flash Federal No. 1 Well. This will include three tanks, an injection pump and metering equipment. Electric power will be extended to the site if available. All water will be chemically treated if necessary and filtered prior to being injected. The tubing and annulus pressures and metered volumes will be monitored on a daily basis. The Well will be used strictly as a disposal well and will not be used for secondary recovery in the Bridger Lake unit. A casing test was performed on the Well on April 15, 1988.

7. Water from Sun's Luckey Ditch unit will be trucked to the disposal Well from the central battery in Section 16, Township 12 North, Range 114 West, 6th P.M. However, Sun intends to install an underground water transfer line to eliminate trucking charges. Phillips also plans to truck water to the disposal Well from their tank battery in Section 23, Township 3 North, Range 14 East, S.L.M.

8. The intended source aquifer does not currently serve as a source of drinking water. The aquifer cannot now and will not in the future serve as a source of drinking water because the aquifer is situated at a depth and a location that makes recovery of water for drinking water purposes economically or technologically impractical.

9. The named corporations and individuals set forth on Schedule 1, attached hereto, constitute all lease operators, owners and surface owners within a one-half ($\frac{1}{2}$) mile radius of the above described proposed injection Well.

10. The granting of the aquifer exemption and the conversion of the Flash Federal No. 1 Well to a water disposal well will enhance the recovery of oil and gas in the Luckey Ditch unit and the Bridger Lake unit is in the public interest, promotes conservation, increases ultimate recovery and prevents waste of oil or gas.

WHEREFORE, Applicant prays for relief as follows:

1. For a hearing on August 25, 1988, to consider Applicant's request for approval of the aquifer exemption for the Dakota formation in Flash Federal No. 1 Well and for authorization of the conversion of the Flash Federal No. 1 Well into a water disposal well.

2. For a final order granting the aquifer exemption and approving the conversion of the well as being in the public interests in that it promotes conservation, increases ultimate recovery and prevents waste of oil or gas.

3. For such other and further action as the Board of Oil, Gas and Mining deems appropriate.

DATED this 8 day of July, 1988.

RAY, QUINNEY & NEBEKER



Alan A. Enke
Attorney for Applicant, Sun
Exploration and Production Company

SUN EXPLORATION AND PRODUCTION COMPANY
Four North Park East
5656 Blackwell
P. O. Box 2880
Dallas, Texas 75221

5053E

SCHEDULE "1"

The following lands listed below with their respective mineral interest and working interest owners, lie within $\frac{1}{2}$ mile radius of either the surface location or the bottom hole location for the Flash Federal #1 Well:

<u>Description</u>	<u>Mineral Owners</u>	<u>Working Interest Owners</u>
1. <u>T3N-R14E, SLM</u> Sec.13: Lot 1, E $\frac{1}{2}$ SE $\frac{1}{4}$ Summit County, Utah	U.S.A.*	Phillips Petroleum Co. 8055 E. Tufts Ave. Pkwy. Denver, CO 80237-2898
<u>T3N-R15E, SLM</u> Sec.18: Lots 1-5, E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ Sec.19: Lot 1, NE $\frac{1}{4}$ E $\frac{1}{2}$ NW $\frac{1}{4}$ Summit County, Utah		
2. <u>T3N-R15E, SLM</u> Sec.18: Lot 6 Summit County, Utah	U.S.A.*	Union Oil Company of California P. O. Box 2620 Casper, WY 82602-2620
3. <u>T12N-R114W, 6th PM</u> Sec.20: S $\frac{1}{2}$ S $\frac{1}{2}$ Sec.29: Lots 1-4 Sec.30: Lot 1 Uinta County, Wyoming	U.S.A.**	A. Sun Operating Limited Partnership B. Robert J. Hewitt One O'Connor Plaza Suite 1100 Victoria, TX 77901 C. General Atlantic Energy Corp. 410 17th St. Suite 1400 Denver, CO 80202 D. Fortune Oil Ltd. 1245 E. Brickyard Rd. Suite 30 Salt Lake City UT 84106

E. Chieftain
International, Ltd.
1201 Toronto Dominion
Tower
Edmonton Centre
Edmonton, Alberta
Canada T5J 2Z1

* Bureau of Land Management
324 South State Street
Suite 301
Salt Lake City, UT 84111-2303

** Bureau of Land Management
P. O. Box 1828
2515 Warren Ave.
Cheyenne, WY 82001

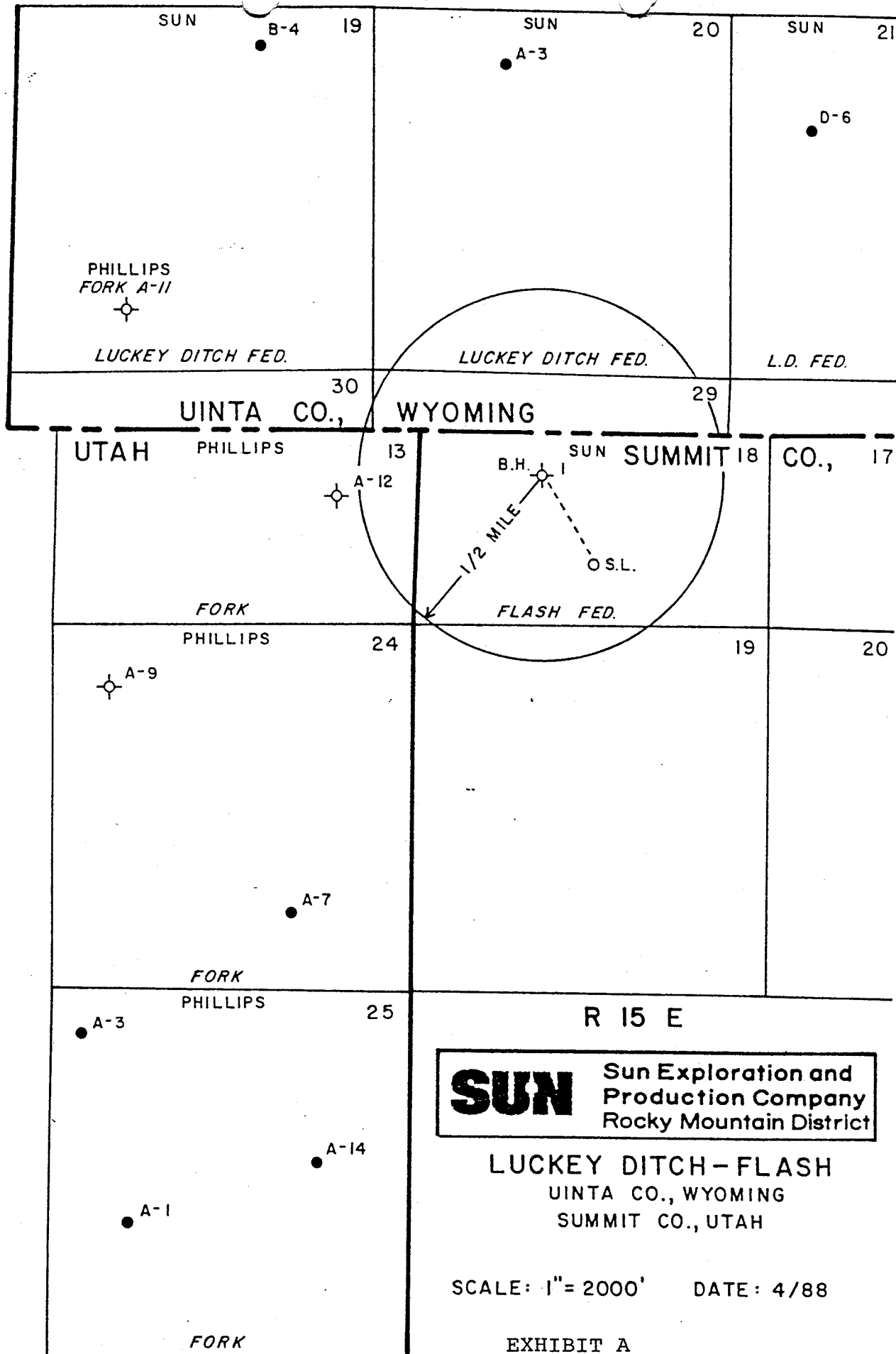
SURFACE OWNERS

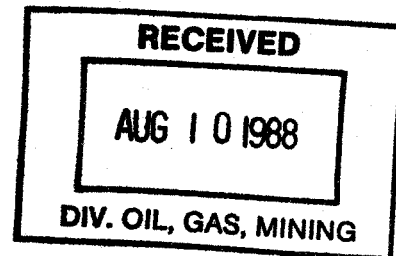
United States
Bureau of Land Management
2515 Warren Avenue
P. O. Box 1828
Cheyenne, WY 82001

United States Forest Service
Kemmerer Ranger District
P. O. Box 31
Kemmerer, WY 83101

Bureau of Land Management
324 South State Street
Suite 301
Salt Lake City, UT 84111-2303

R 114 W

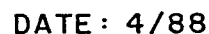




CAUSE NO. WD-103
DOCKET NO. 88-014

FLASH FEDERAL #1
EXHIBITS

Exhibit No. 2



Flash Federal #1

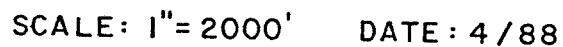
Proposed Injection Program

Sun is currently producing an average of 450 BWPB from the Dakota formation in the Luckey Ditch Field in Uinta County, Wyoming. Presently this water is being trucked to a disposal well owned by Phillips. The volume of produced water has increased significantly due to the recent surge of development in this area. The capacity of Phillips disposal well has become inadequate and is no longer used for disposal. Therefore, Sun proposes to convert the Flash Federal #1 to a disposal well.

As previously stated, the water to be injected is produced from the Dakota formation in the Luckey Ditch Unit as well as Phillips Bridger Lake Unit located in Summit County, Utah. The total estimated daily average injection rate will be 800 BWPB; 450 BPD from Sun and 350 BPD from Phillips. The maximum anticipated injection rate is 2000 BWPB. The initial injection pressure is expected to be 1000 psi. Maximum injection pressure should not exceed 3000 psi.

Equipment for handling the water injected will be installed at the Flash Federal #1. This will include tanks, an injection pump, and metering equipment. Electric power will be extended to the site if available. All water will be chemically treated as necessary and filtered prior to being injected. The tubing and annulus pressures and metered volumes will be monitored on a daily basis.

Initially, water from Sun's Luckey Ditch Unit will be trucked to the disposal well from the central battery in Section 16, T12N, R114W. However, Sun intends to install an underground water transfer line to eliminate trucking charges. Phillips also plans to truck water to the disposal well from their tank battery in Section 23, T3N, R14E, Summit County, Utah.



FLASH FEDERAL #1
COMPLETION DATA

LOCATION: 900' FSL, 2600' FWL, SECTION 18, T3N, R15E, SUMMIT COUNTY, UTAH

ELEVATIONS: GL - 8,733' KB - 8,760'

SPUDDER: 8-30-87

COMPLETED: 4-25-88

TD: 15,983'

PBTD: 15,927'

PERFORATIONS: 15,792'-15,822' DAKOTA SAND

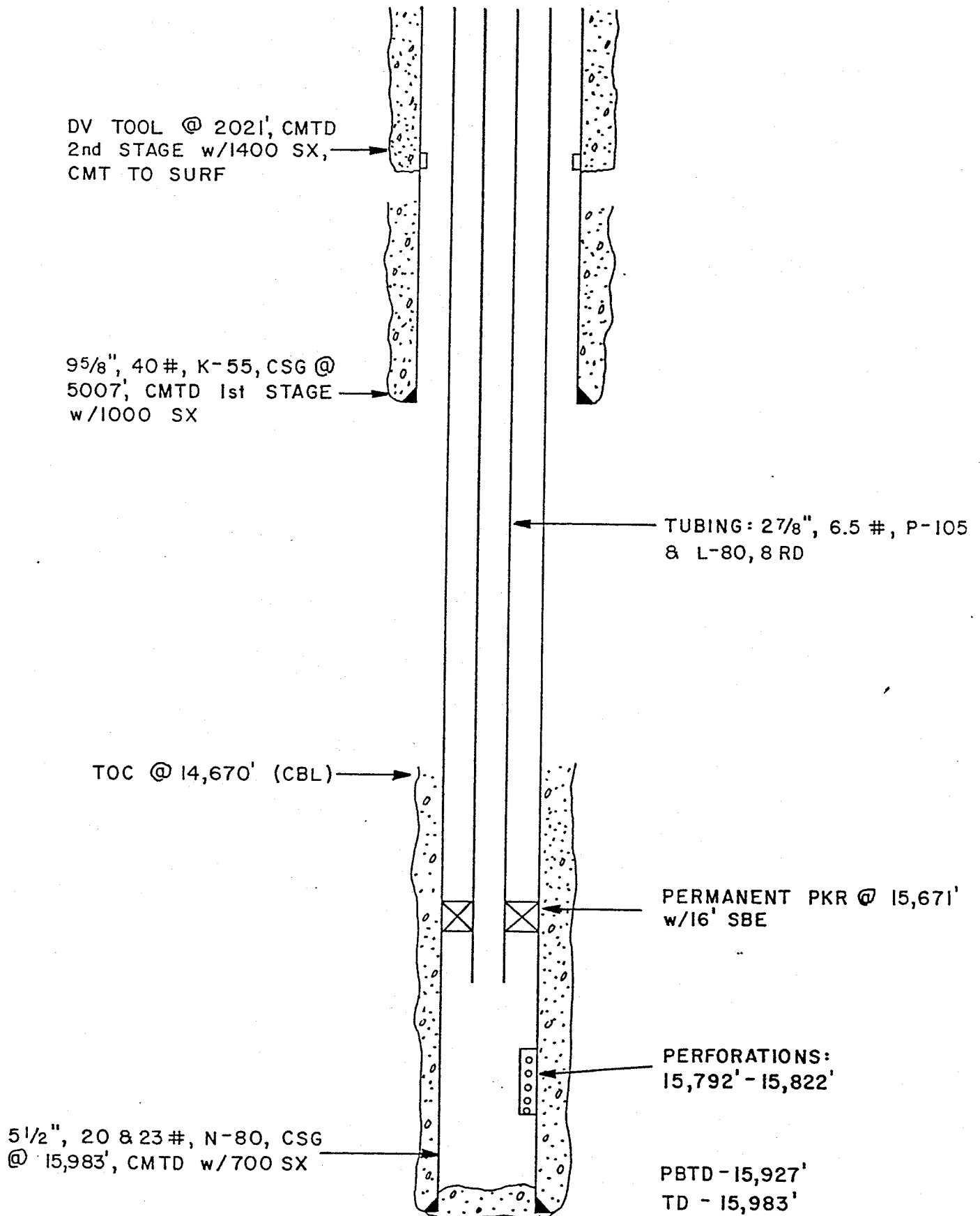
CASING DATA: 9-5/8", 40#, K-55, LT&C
CS-5007', FC-4923, DV TOOL-2021'
CMTD 1ST STAGE W/1000 SX CMT, DID NOT BUMP PLUG, OPEN
DV TOOL AND CIRC 4 HRS., NO CMT TO SURF.
CMTD 2ND STAGE W/1400 SX CMT, CIRC 80 SX TO SURF.
DRILLED OUT AND PRESS TEST CSG TO 1500 PSI.

5-1/2", 20 & 23#, N-80, LTC & BTC
CS-15,983', FC-15,893'
CMTD W/700 SX CL-H CMT, FP 1800-2100.
TOC @ 14,670'

NOTE: BOTTOM HOLE LOCATION - 3184' FSL, 1832' FWL
ALL DEPTHS ARE MEASURED DEPTHS.

The Flash Federal #1 was side-tracked and drilled to a bottom hole location of 3184' FSL, 1832' FWL, Section 18. A permanent packer was set at 15,671' by wireline. Tubing was run in the hole and tested to 7000 psi. The annulus was circulated with 3% KCL water containing a corrosion inhibitor. After landing the tubing into the packer seal bore, the annulus was tested to 2000 psi. The Dakota was perforated from 15,792' to 15,822'. No hydrocarbons were recovered from this interval.

FLASH FEDERAL #1



FLASH FEDERAL #1

SCHLUMBERGER

CEMENT BOND LOG

4/12/88

Cause No. WD-103

Docket No. 88-014

Exhibit No. 6

15800

CASING
COLLAR

GAMMA RAY

TENSION

3-FI TRAVEL
TIME (S)

FRCC

FRGR

15900

FK OBL

3-FI AMPLITUDE

AMPLITUDE

MAXIMUM INJECTION PRESSURE CALCULATIONS
FLASH FEDERAL #1

I. BOTTOM HOLE FRACTURE PRESSURE

FG = 0.75 psi/ft based on average service company data for the
Dakota in the surrounding area.

$$\begin{aligned}\text{BHFP} &= \text{FG} \times \text{Depth} \\ &= 0.75 \times 15807'\end{aligned}$$

$$\text{BHFP} = 11855 \text{ psi}$$

II. MAXIMUM SURFACE INJECTION PRESSURE

$$\text{SWHP} = \text{BHFP} - \text{Ph} + \text{Ppipe} + \text{Pperf}$$

$$\begin{aligned}\text{Ph} &= \text{Density (lb/gal)} \times \text{Depth (ft)} \times 0.052 \\ \text{Ph} &= 8.397 \times 15,807' \times 0.052 \\ \text{Ph} &= 6902 \text{ psi}\end{aligned}$$

$$\begin{aligned}\text{Ppipe} &= 21 \text{ psi/1000'} \text{ (assuming instantaneous rate of 2000 BPD)} \\ \text{Ppipe} &= 330 \text{ psi}\end{aligned}$$

$$\text{Pperf} = 0 \text{ psi}$$

$$\text{SWHP} = 11855 - 6902 + 330 + 0$$

$$\text{SWHP} = 5283 \text{ psi}$$

BHFP - Bottom Hole Frac Pressure
FG - Frac Gradient
Ph - Hydrostatic Pressure
Pperf - Perforation Friction
Ppipe - Pipe Friction
SWHP - Surface Wellhead Pressure

GREAT LAND DIRECTIONAL DRILLING INC.

REPORT OF SUB-SURFACE DIRECTIONAL SURVEY

Sun Exploration
COMPANY

Flash Federal #1
WELL NAME

Lone Tree, Wyoming
LOCATION

RMC12-87-D81 Gyroscopic Survey December 13, 1987
JOB NUMBER TYPE SURVEY DATE

THIS IS A RECORD OF A SUB-SURFACE SURVEY OF YOUR WELL

We have retained a copy of your survey report in our files for your convenience; however, should you so desire, all copies of the survey report will be forwarded to you on written request. All surveys are kept in a locked file and are held in strictest confidence. Additional copies of your survey report can be made from the original by any blueprint company.

43-043-30282

GYROSCOPIC DIRECTIONAL SURVEY
BY RADIUS OF CURVATURE

※ SUN EXPLORATION ※

GYRO REFERENCE BEARING: N54.00E

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*****
*****
*****THIS DIRECTIONAL SURVEY REPORT IS*****
*****CORRECT TO THE BEST OF MY KNOWLEDGE*****
*****AND IS SUPPORTED BY ACTUAL FIELD DATA!*****
*****
*****
*****Paul Dawson*****
*****COMPANY REPRESENTATIVE*****
*****
*****
*****
```

GREAT LAND DIRECTIONAL DRILLING
CASPER, WYOMING

JOB NUMBER: 050-MSRG-379

WELL NAME: FLASH FEDERAL #1

INRUN SURVEY
BY

RADIUS OF CURVATURE

MEAS. DEPTH	VERT. DEPTH	VERT. SECT.	COURSE DEV.	INCL	BEARING	COORDINATES LATITUDE DEPARTURE	D-LEG PER 100	STATION DISP.	DISPLACEMENT DIRECTION
100.0	100.00	0.13	0.38	00-26	N 79-30 W	0.07 N 0.37 W	0.43	0.38 AT N 79-30 W	
200.0	199.99	0.88	0.92	00-37	N 39-24 E	0.78 N 0.63 W	0.91	1.01 AT N 38-55 W	
300.0	299.98	1.86	1.82	01-28	N 55-30 E	2.01 N 0.70 E	0.89	2.13 AT N 19-16 E	
400.0	399.95	3.00	2.20	01-03	N 41-46 E	3.46 N 2.35 E	0.51	4.18 AT N 34-10 E	
500.0	499.94	3.62	1.53	00-42	N 69-35 E	4.31 N 3.60 E	0.54	5.61 AT N 39-50 E	
600.0	599.93	4.05	1.32	00-49	N 52-54 E	4.94 N 4.75 E	0.25	6.86 AT N 43-52 E	
700.0	699.92	4.26	1.47	00-52	S 89-53 E	5.40 N 6.12 E	0.54	8.16 AT N 48-34 E	
800.0	799.91	3.62	1.44	00-47	S 56-56 E	5.00 N 7.48 E	0.47	9.00 AT N 56-16 E	
900.0	899.90	2.73	1.21	00-36	S 47-01 E	4.25 N 8.43 E	0.22	9.44 AT N 63-14 E	
1000.0	999.90	1.97	1.00	00-33	S 55-37 E	3.63 N 9.21 E	0.10	9.90 AT N 68-31 E	
1100.0	1099.89	1.23	0.90	00-29	S 31-07 E	2.98 N 9.83 E	0.23	10.27 AT N 73-09 E	
1200.0	1199.89	0.44	0.86	00-29	S 36-18 E	2.26 N 10.30 E	0.05	10.55 AT N 77-37 E	
1300.0	1299.89	-0.12	0.74	00-22	S 64-07 E	1.79 N 10.87 E	0.23	11.02 AT N 80-38 E	
1400.0	1399.89	-0.33	0.65	00-23	N 82-06 E	1.69 N 11.51 E	0.22	11.63 AT N 81-38 E	
1500.0	1499.88	-0.20	0.63	00-20	N 54-34 E	1.92 N 12.08 E	0.18	12.23 AT N 80-58 E	
1600.0	1599.88	-0.02	0.55	00-18	N 67-38 E	2.19 N 12.56 E	0.08	12.75 AT N 80-07 E	
1700.0	1699.88	0.21	0.38	00-08	N 09-41 E	2.47 N 12.79 E	0.26	13.03 AT N 79-04 E	
1800.0	1799.88	0.30	0.26	00-10	S 71-41 E	2.59 N 12.99 E	0.23	13.24 AT N 78-44 E	
1900.0	1899.88	-0.05	0.42	00-19	S 45-26 W	2.25 N 13.07 E	0.42	13.26 AT N 80-15 E	
2000.0	1999.88	-0.46	0.54	00-18	N 89-29 E	1.86 N 13.23 E	0.57	13.36 AT N 82-00 E	

GREAT LAND DIRECTIONAL DRILLING
CASPER, WYOMING

JOB NUMBER: 050-MSRG-379

WELL NAME: FLASH FEDERAL #1

INRUN SURVEY
BY

RADIUS OF CURVATURE

MEAS. DEPTH	VERT. DEPTH	VERT. SECT.	COURSE DEV.	INCL	BEARING	COORDINATES		D-LEG PER 100	STATION DISPLACEMENT	
						LATITUDE	DEPARTURE		DISP.	DIRECTION
2100.0	2099.88	-0.40	0.48	00-15	N 54-55 E	2.00 N	13.68 E	0.17	13.82	AT N 81-40 E
2200.0	2199.88	-0.17	0.38	00-11	N 29-24 E	2.28 N	13.93 E	0.12	14.12	AT N 80-42 E
2300.0	2299.88	0.15	0.36	00-14	N 07-16 E	2.62 N	14.04 E	0.09	14.29	AT N 79-25 E
2400.0	2399.88	0.50	0.42	00-15	N 75-11 W	2.94 N	13.83 E	0.32	14.14	AT N 77-59 E
2500.0	2499.87	0.69	0.68	00-32	S 87-50 W	3.02 N	13.15 E	0.30	13.49	AT N 77-04 E
2600.0	2599.87	0.83	1.05	00-40	S 87-29 W	2.98 N	12.11 E	0.13	12.47	AT N 76-11 E
2700.0	2699.86	1.03	1.37	00-54	S 88-59 W	2.93 N	10.74 E	0.23	11.13	AT N 74-43 E
2800.0	2799.84	1.41	1.70	01-03	N 83-09 W	3.02 N	9.04 E	0.20	9.53	AT N 71-32 E
2900.0	2899.83	2.08	1.88	01-06	N 75-00 W	3.38 N	7.20 E	0.16	7.95	AT N 64-53 E
3000.0	2999.80	3.03	2.12	01-20	N 71-24 W	3.99 N	5.17 E	0.25	6.53	AT N 52-20 E
3100.0	3099.78	4.27	2.31	01-19	N 64-06 W	4.86 N	3.03 E	0.17	5.73	AT N 31-55 E
3200.0	3199.75	5.44	2.14	01-08	N 69-13 W	5.71 N	1.07 E	0.21	5.81	AT N 10-35 E
3300.0	3299.73	6.59	2.07	01-14	N 63-17 W	6.54 N	0.82 W	0.16	6.59	AT N 07-10 W
3400.0	3399.71	8.03	2.17	01-15	N 53-09 W	7.68 N	2.66 W	0.22	8.13	AT N 19-07 W
3500.0	3499.69	9.55	2.01	01-03	N 48-20 W	8.95 N	4.22 W	0.22	9.89	AT N 25-13 W
3600.0	3599.67	10.93	1.73	00-56	N 45-44 W	10.13 N	5.48 W	0.13	11.52	AT N 28-25 W
3700.0	3699.66	12.14	1.54	00-50	N 50-47 W	11.16 N	6.63 W	0.13	12.98	AT N 30-44 W
3800.0	3799.66	13.11	1.16	00-30	N 35-05 W	12.01 N	7.42 W	0.38	14.12	AT N 31-43 W
3900.0	3899.65	13.94	0.90	00-32	N 29-50 W	12.77 N	7.91 W	0.06	15.02	AT N 31-46 W
4000.0	3999.65	14.91	0.99	00-36	N 14-49 W	13.68 N	8.28 W	0.16	15.99	AT N 31-11 W

GREAT LAND DIRECTIONAL DRILLING
CASPER, WYOMING

JOB NUMBER: 050-MSRG-379

WELL NAME: FLASH FEDERAL #1

INRUN SURVEY
BY

RADIUS OF CURVATURE

MEAS. DEPTH	VERT. DEPTH	VERT. SECT.	COURSE DEV.	INCL	BEARING	COORDINATES		D-LEG PER 100	STATION DISPLACEMENT	
						LATITUDE	DEPARTURE		DISP.	DIRECTION
4100.0	4099.64	15.82	0.92	00-27	N 04-14 W	14.58 N	8.43 W	0.18	16.84	AT N 30-02 W
4200.0	4199.64	16.63	0.83	00-30	N 09-12 E	15.41 N	8.40 W	0.12	17.55	AT N 28-35 W
4300.0	4299.64	17.36	0.77	00-23	N 08-12 E	16.17 N	8.28 W	0.12	18.17	AT N 27-07 W
4400.0	4399.63	17.87	0.60	00-18	N 33-18 E	16.72 N	8.07 W	0.17	18.57	AT N 25-46 W
4500.0	4499.63	18.46	0.77	00-31	N 26-10 E	17.39 N	7.69 W	0.16	19.02	AT N 23-51 W
4600.0	4599.63	19.19	0.89	00-30	N 23-48 E	18.20 N	7.31 W	0.03	19.61	AT N 21-54 W
4700.0	4699.62	19.93	0.99	00-38	N 38-15 E	19.04 N	6.80 W	0.19	20.22	AT N 19-40 W
4800.0	4799.61	20.80	1.24	00-47	N 33-12 E	20.04 N	6.08 W	0.16	20.95	AT N 16-53 W
4900.0	4899.60	22.01	1.64	01-06	N 31-29 E	21.43 N	5.20 W	0.32	22.06	AT N 13-39 W
5000.0	4999.58	23.60	2.12	01-20	N 31-36 E	23.24 N	4.09 W	0.23	23.60	AT N 09-59 W

* THE HORIZONTAL DISPLACEMENT AT THE DEPTH OF *
* 5000.0 FEET EQUALS 23.60 FEET AT N 09-59 W *

GREAT LAND DIRECTIONAL DRILLING
CASPER, WYOMING

GYROSCOPIC DIRECTIONAL SURVEY

FOR

SUN EXPLORATION

WELL NAME: FLASH FEDERAL #1

JOB NUMBER:
050-MSRG-379

DATE: 13 DECEMBER 1987

INRAN SURVEY BY RADIUS OF CURVATURE

HORIZONTAL DISPLACEMENT (* --- *) AT 5000.0 FEET

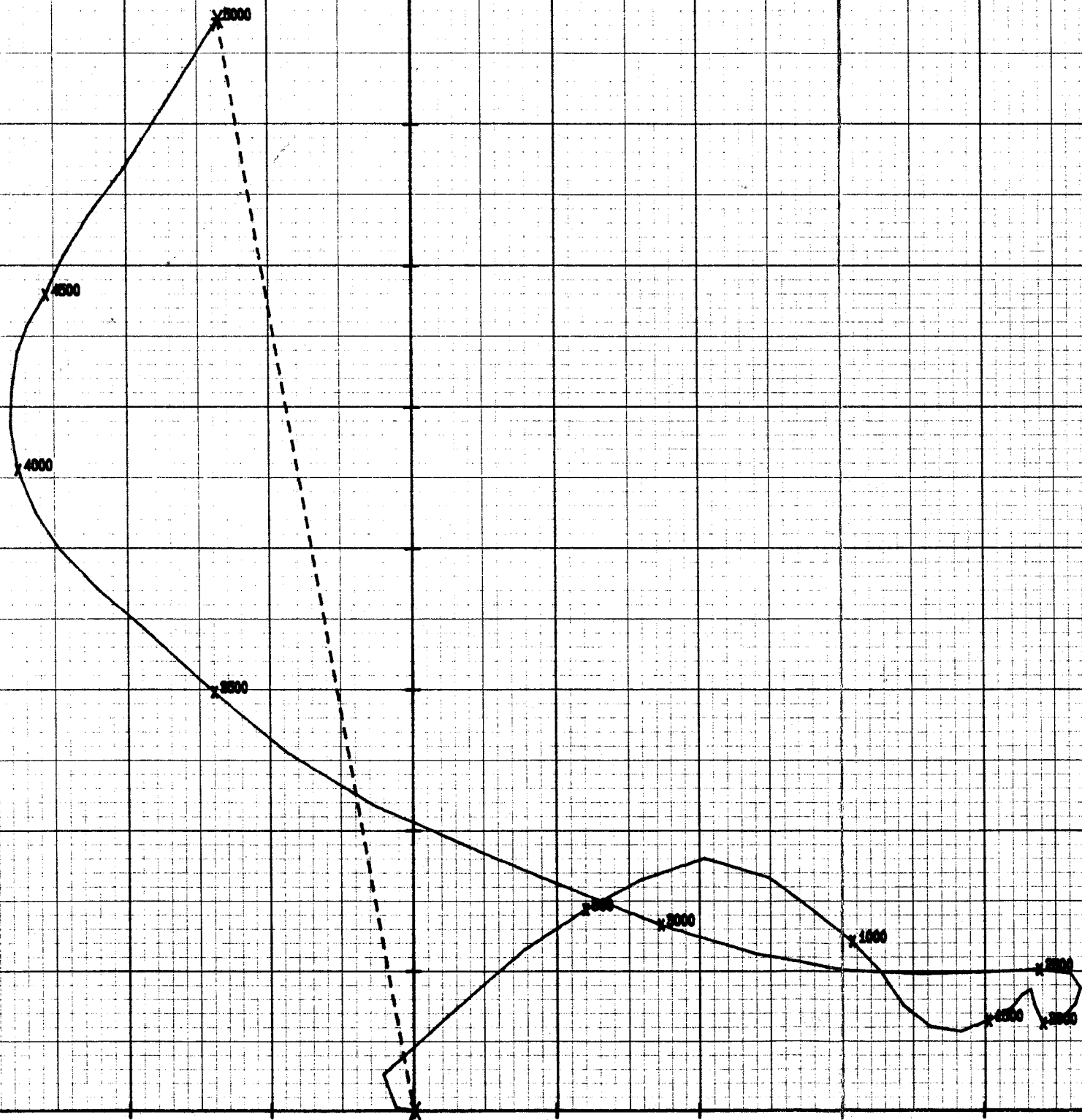
EQUALS 23.60 FEET

AT N 09-59 W

X DENOTES EVERY 5 STATION(S)

PLAN VIEW

SCALE = 3 FEET/INCH



GREAT LAND DIRECTIONAL DRILLING
CASPER, WYOMING

GYROSCOPIC DIRECTIONAL SURVEY

FOR

SUN EXPLORATION

WELL NAME: FLASH FEDERAL #1

JOB NUMBER:

DATE:

050-MSRG-379

13 DECEMBER 1987

INRUN SURVEY BY RADIUS OF CURVATURE

VERTICAL PROJECTION (* --- *) AT 4999.58 FEET

EQUALS 4999.63 FEET AT 00-16

X DENOTES EVERY 5 STATION (S)

HORIZONTAL SCALE = 500 FEET/INCH

VERTICAL SCALE = 500 FEET/INCH

VERTICAL SECTION

PERPENDICULAR TO CLOSURE

500

1000

1500

2000

2500

3000

3500

4000

4500

5000

BEFORE THE OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF WYOMING

IN THE MATTER OF A HEARING BROUGHT ON THE
APPLICATION OF SUN EXPLORATION AND PRODUC-
TION COMPANY, FOR AN ORDER FROM THE COMMISS-
SION UNDER THE RULES AND REGULATIONS OF THE
UNDERGROUND INJECTION CONTROL PROGRAM FOR
AN AQUIFER EXEMPTION FOR THE DAKOTA FORMA-
TION UNDERLYING LANDS IN PORTIONS OF SEC-
TION 29, TOWNSHIP 12 NORTH, RANGE 114 WEST,
LUCKEY DITCH FIELD AREA, UINTA COUNTY,
WYOMING; AND TO TAKE WHATEVER OTHER ACTION
SEEMS APPROPRIATE TO THE COMMISSION

CAUSE NO. 2
ORDER NO. 1
DOCKET NO. 292-88

REPORT OF THE EXAMINER

On September 22, 1988, the Board of Oil, Gas, and Mining of the State of Utah held a hearing and issued an order to Sun Exploration and Production Company granting an aquifer exemption for the Dakota Formation and authorizing the conversion of the Flash Federal No. 1 well at a surface location in the SW $\frac{1}{4}$ of Section 18, Township 3 North, Range 15 East, Summit County, Utah, to a water disposal well. A portion of the notice area and exemption area are in Wyoming, necessitating approval by the Wyoming Oil and Gas Conservation Commission of an aquifer exemption for the Dakota Formation underlying these lands. Because of the nature of this matter, no formal hearing by the Wyoming Oil and Gas Conservation Commission is necessary or warranted.

FINDINGS OF FACT

1. This action, to exempt the Dakota Formation underlying the following described lands from the definition and protection of fresh and potable water is necessitated as a condition of approval of an application to dispose of produced water under the Underground Injection Control Program, to wit:

Township 12 North, Range 114 West, 6th P.M.
Section 20: S $\frac{1}{2}$ S $\frac{1}{2}$ Section 29: All

2. Notice of this matter was published on August 24, 1988, in the "Uinta County Herald," a paper in circulation in Uinta County, Wyoming, and on August 17, 1988, in the "Casper Star-Tribune," a paper in general circulation in Wyoming.

3. Due and legal notice was also given to all interested persons in accordance with applicable law, and with the practices and orders of the State of Utah Board of Oil, Gas, and Mining. This notice is hereby incorporated by reference.

4. On September 26, 1988, the State of Utah, Board of Oil, Gas, and Mining issued an order granting an aquifer exemption for the Dakota Formation underlying certain lands in Summit County, Utah, and approving the conversion of the Flash

Federal No. 1 well, located in the SW $\frac{1}{4}$ of Section 18, Township 3 North, Range 15 East, to a water disposal well which will receive water from Luckey Ditch and Bridger Lake Units.

5. Analysis of the Dakota interval in the Flash Federal No. 1 well showed a total dissolved solids concentration of 9,872 parts per million.

CONCLUSIONS OF LAW

1. Due and legal notice of time, place and purpose of this hearing was given to all interested parties in all respects as required by law.

2. The Commission has jurisdiction over this matter and over all parties interested, and has jurisdiction to make and promulgate the order hereinafter set forth.

3. We conclude that the Dakota Formation underlying the aforescribed lands should be exempt from the definition and protection of fresh and potable water because the interval is hydrocarbon energy producing.

4. We also conclude that the exemption should be granted because the interval has a total dissolved solids concentration of more than 5,000 milligrams per liter and is not reasonably expected to be used as fresh or potable water because the disposal interval is encountered at depths in excess of 15,000 feet.

ORDER

IT IS THEREFORE HEREBY ORDERED BY THE COMMISSION that the Dakota Formation underlying the following described lands in Luckey Ditch Unit, Uinta County, Wyoming, be exempt from the definition and protection of fresh and potable water under the Commission's rules, to wit:

Township 12 North, Range 114 West, 6th P.M.
Section 20: S $\frac{1}{2}$ S $\frac{1}{2}$ Section 29: All

DATED this 23rd day of September 1988.

WYOMING OIL AND GAS
CONSERVATION COMMISSION

/S/ Gene R. George
Mr. Gene R. George,
Commissioner

/S/ Gary B. Glass
Mr. Gary B. Glass,
Acting Chairman-Commissioner

/S/ Mark Watson
Mr. Mark Watson - Examiner

/S/ Howard M. Schrinar
Mr. Howard M. Schrinar,
Commissioner

/S/ Janie F. Nelson
Ms. Janie F. Nelson - Examiner

/S/ Eddie Moore
Mr. Eddie Moore,
Commissioner

BEFORE THE BOARD OF OIL, GAS AND MINING
DEPARTMENT OF NATURAL RESOURCES
STATE OF UTAH

----oo0oo----

In the Matter of the Request	:	
for Agency Action of Sun	:	
Exploration and Production	:	Docket No. 88-014
Company for an Aquifer	:	
Exemption and also for	:	
Authorization of the Conversion	:	Cause No. WD-103
to a Water Disposal Well for	:	
the Flash Federal No. 1 Well,	:	
Section 18, Township 3 North,	:	ORDER
Range 15 East, Summit County,	:	
Utah	:	

----oo0oo----

This matter was heard before the Board of Oil, Gas and Mining at its regularly scheduled meeting at 10:00 a.m. on September 22, 1988, in the Board Room of the Department of Natural Resources, 355 West North Temple, 3 Triad Center, Salt Lake City, Utah. The hearing had been continued from August 25, 1988. The following Board Members, constituting a quorum, were present and participated in the hearing and the decision embodied herein:

Gregory P. Williams, Chairman
James W. Carter
John M. Garr*
Charles R. Henderson
E. Steele McIntyre
Judy F. Lever*
Richard B. Larsen

The Board of Oil, Gas and Mining was represented by Alan S. Bachman, Assistant Attorney General.

Members of the Division of Oil, Gas and Mining present at and participating in the hearing included:

Dr. Dianne R. Nielson, Director
Ronald J. Firth, Associate Director, Oil & Gas
John R. Baza, Petroleum Engineer
Gilbert L. Hunt, Supervisor,
Environmental/Geological Section

The Division of Oil, Gas and Mining was represented by Barbara W. Roberts, Assistant Attorney General.

The Utah State Office, Bureau of Land Management, Salt Lake City, was represented by Bob Henricks.

The following appeared at the Hearing:

Sun Exploration and Production Company

By: Alan A. Enke, Esq.
RAY, QUINNEY & NEBEKER
Salt Lake City, Utah

R. Mark Galloway, Esq.
Sun Exploration and Production Company
Dallas, Texas

Fortune Oil Ltd.
Chieftain International Inc.
General Atlantic Energy Corporation

By: Robert G. Pruitt, Jr.
PRUITT, GUSHEE & FLETCHER
Salt Lake City, Utah

Testimony was received from, and exhibits were introduced on behalf Sun Exploration and Production Company by Jon Roderick, Petroleum Landman, Rita Monroe Galvin, Petroleum Engineer and Operations Manager, Rickie Morgan, Geologist, and Ken Mueller, Petroleum Reservoir Engineer, all of whom were recognized by the Board as experts in their respective fields in the context of this matter. In addition, John Anderson, an officer in Fortune Oil Ltd. and Frank E. Syfan, an independent Petroleum Engineer, testified on behalf of Fortune Oil Ltd., Chieftain International Inc. and General Atlantic Energy Corporation, and were also recognized by the Board as experts in their respective fields in the context of the matter before the Board.

The Board, having considered the testimony, exhibits, and evidence presented and the statements made by the participants at the hearing, now makes and enters the following:

FINDINGS OF FACT

1. On July 8, 1988, Sun Exploration and Production Company ("Sun"), submitted this Request for Agency Action for the authorization of the conversion of the Flash Federal No. 1 Well located in Section 18, Township 3 North, Range 15 East, S.L.M., in Summit County (the "Well"), into a water disposal well and the granting of an aquifer exemption for the Dakota formation in the Well, pursuant to Rules R615-5-3 and R615-5-4 of the Board of

Oil, Gas & Mining, Oil and Gas Conservation General Rules, and pursuant to § 40-6-5, Utah Code Annotated, 1953, as amended.

2. Sun is the operator of the federally administered Luckey Ditch Unit located in Uinta County, Wyoming, said unit lands generally being located in Township 12 North, Range 14 West, 6th P.M., bordered on the south by the Utah-Wyoming state line.

3. Pursuant to R615-5-3, Sun filed an application for approval of the Flash Federal No. 1 Well as an injection well on June 1, 1988. By letter dated June 14, 1988, the State of Utah, Division of Oil, Gas and Mining, informed Sun that the application for approval could not be granted until an aquifer exemption was granted pursuant to R615-5-4.

4. Sun is currently producing an average of 450 barrels of water per day from the Dakota formation in the Luckey Ditch field, Uinta County, Wyoming. Presently, this water is being transported by truck to various disposal areas at great expense to the Petitioner.

5. The Flash Federal No. 1 Well is located in Section 18, Township 3 North, Range 15 East, S.L.M., in Summit County, Utah. The surface location of the Well is 900 feet from the south line and 2,600 feet from the west line of Section 18; the bottom hole location is 3,184 feet from the south line and 1,832 feet from the west line of Section 18.

6. The water to be injected into the Well will be produced from the Dakota formation in the Luckey Ditch unit and from the Phillips Bridger Lake unit which is located south of the Utah-Wyoming border in Summit County, Utah. The maximum anticipated injection rate is 2,000 BWPd. The initial injection pressure is expected to 1,000 psi. Maximum injection pressure should not exceed 3,000 psi. The injection interval in the well would be from 15,792 feet to 15,822 feet below the surface of the earth.

7. The intended source aquifer does not currently serve as a source of drinking water.

8. The aquifer cannot now and will not in the future serve as a source of drinking water because the aquifer is situated at a depth and a location that makes recovery of water for drinking water purposes economically or technologically impractical.

9. The aquifer is hydrocarbon producing, and contains hydrocarbons that, considering their quantity and location, are commercially producible.

CONCLUSIONS OF LAW

1. Due and regular notice of the time, place, and subject matter of this hearing in Cause WD-103 was given to all interested persons in accordance with applicable law, and with the rules, practices and orders of the Board pertaining to this matter.

2. The Petition of Sun Exploration and Production Company in this matter was properly before the Board at the hearing, and the Board has jurisdiction over the matters contained therein.

3. The granting of the aquifer exemption is justified because of the nature, characteristics and location of the water found in the Dakota formation.

4. The conversion of the Flash Federal No. 1 Well to a water disposal well will enhance the recovery of oil and gas in the Luckey Ditch unit and in the Bridger Lake unit, and is in the public interest in that it promotes conservation, increases ultimate recovery and prevents waste of oil or gas.

ORDER

IT IS HEREBY ORDERED THAT:

1. The application for an aquifer exemption for the Dakota formation in Flash Federal No. 1 Well is approved.

2. The application for the conversion of the Flash Federal No. 1 Well into a water disposal well in the Dakota formation is also approved.

ENTERED this 26th day of September, 1988.

STATE OF UTAH
BOARD OF OIL, GAS AND MINING

By 

Gregory P. Williams, Chairman

APPROVED AS TO FORM:

Alan S. Bachman

* Mr. Garr and Ms. Lever were present at the hearing but left prior to the time a decision was reached in this matter.

BEFORE THE BOARD OF OIL, GAS AND MINING
DEPARTMENT OF NATURAL RESOURCES
STATE OF UTAH

---ooOoo---

IN THE MATTER OF THE REQUEST FOR	:	NOTICE OF HEARING
AGENCY ACTION OF SUN EXPLORATION	:	
AND PRODUCTION COMPANY FOR AN	:	DOCKET NO. 88-014
AQUIFER EXEMPTION AND ALSO FOR	:	CAUSE NO. WD-103
AUTHORIZATION OF THE CONVERSION	:	
TO A WATER DISPOSAL WELL FOR THE	:	
FLASH FEDERAL NO. 1 WELL,	:	
SECTION 18, TOWNSHIP 3 NORTH,	:	
RANGE 15 EAST, SUMMIT COUNTY,	:	
UTAH	:	

---ooOoo---

THE STATE OF UTAH TO ALL PERSONS INTERESTED IN THE ABOVE
ENTITLED MATTER.

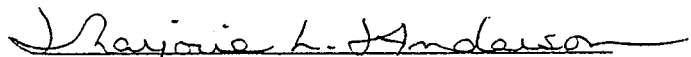
Notice is hereby given that the Board of Oil, Gas and Mining will conduct a hearing on Thursday, August 25, 1988, at 10:00 a.m., or as soon thereafter as possible, in the boardroom of the Division of Oil, Gas and Mining, 355 West North Temple, 3 Triad Center, Suite 350, Salt Lake City, Utah. The hearing will be conducted in accordance with Section 63-46b U.C.A. (1953, as amended).

The purpose of the proceeding will be to consider the Applicant's request for approval of an aquifer exemption for the Dakota formation in Flash Federal No. 1 Well and for authorization of the conversion of the Flash Federal No. 1 Well into a water disposal well.

Persons interested in this matter may participate pursuant to the Procedural Rules of the Board. The rules may be inspected in the office of the undersigned, 355 West North Temple, 3 Triad Center, Suite 350, Salt Lake City, Utah, (801) 538-5340.

DATED this 1st day of August, 1988.

STATE OF UTAH
BOARD OF OIL, GAS AND MINING


Marjorie L. Anderson
Secretary of the Board

RAY, QUINNEY & NEBEKER
PROFESSIONAL CORPORATION
ATTORNEYS AT LAW

ALONZO W. WATSON, JR.
STEPHEN B. NEBEKER
MITCHELL MELICH
L. RIDD LARSON
DON B. ALLEN
MERLIN O. BAKER
CLARK P. GILES
JAMES W. FREED
NARRVEL E. HALL
JAMES L. WILDE
M. JOHN ASHTON
HERBERT C. LIVSEY
WILLIAM A. MARSHALL
JAMES Z. DAVIS
PAUL S. FELT
GERALD T. SNOW
ALAN A. ENKE
JONATHAN A. DIBBLE
SCOTT H. CLARK
STEVEN H. GUNN
JAMES S. JARDINE
KENT H. MURDOCK
JANET HUGIE SMITH
DOUGLAS MATSUMORI
ROBERT P. HILL
RICHARD G. ALLEN
ANTHONY W. SCHOFIELD
ALLEN L. ORR
BRAD D. HARDY
BRIAN E. KATZ
A. ROBERT THORUP
*JOHN P. HARRINGTON
BRENT W. TODD

LARRY G. MOORE
ANTHONY B. QUINN
THOMAS L. KAY
BRUCE L. OLSON
JOHN A. ADAMS
DOUGLAS M. MONSON
CRAIG CARLILE
STEVEN W. HARRIS
RICHARD H. CASPER
JAMES M. DESTER
DEE R. CHAMBERS
KEVIN G. GLADE
JEFFREY D. EISENBERG
ENID GREENE
LESTER K. ESSIG
IRA B. RUBINFELD
STEPHEN C. TINGEY
CRAIG L. TAYLOR
KELLY J. FLINT
MARK O. MORRIS
STEVEN J. AESCHBACHER
PAUL D. NEWMAN
KEITH A. KELLY
RICK L. ROSE
MARK Y. HIRATA
RICK B. HOGGARD
LYNN H. PACE
LISA A. YERKOVICH
OF COUNSEL
ALBERT R. BOWEN
W. J. O'CONNOR, JR.

* ADMITTED IN COLORADO & TEXAS

RECEIVED

AUG 10 1988

DIV. OIL, GAS, MINING

400 DESERET BUILDING
79 SOUTH MAIN STREET
P. O. BOX 45385
SALT LAKE CITY, UTAH 84145-0385
TELEPHONE (801) 532-1500
TELECOPIER NO. (801) 532-7543

210 FIRST SECURITY BANK BLDG.
92 NORTH UNIVERSITY AVENUE
PROVO, UTAH 84601-4420
(801) 226-7210

1020 FIRST SECURITY BANK BLDG.
2404 WASHINGTON BOULEVARD
OGDEN, UTAH 84401-2306
(801) 621-0713

PAUL H. RAY (1893-1967)
A. H. NEBEKER (1895-1980)
S. J. QUINNEY (1893-1983)

August 10, 1988

Via Hand Delivery

DIVISION OF OIL, GAS & MINING
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
Attn: Ms. Marjie Anderson

Re: Docket No. 88-014
Cause No. WD-103

Dear Marjie:

Enclosed please find twelve copies of the exhibits we intend to enter into evidence for the hearing scheduled on August 25, 1988.

If either you or any of your staff members have any questions, please feel free to call.

Very truly yours,

RAY, QUINNEY & NEBEKER



Alan A. Enke

AAE:073E
Enclosures



RECEIVED
AUG 18 1988

August 16, 1988

DIVISION OF
OIL, GAS & MINING

**Sun Exploration and
Production Company**
PO Box 5940
Terminal Annex
Denver CO 80217-5940
303 696 3500

Utah Oil & Gas Commission
3 Triad Center
Suite #350
Salt Lake City, UT 84180

Attention: Gil Hunt

RE: Request for Additional
Data to Obtain EPA
Aquifer Exemption

Gil,

Enclosed is a stratigraphic map detailing the Bridger Lake area. Our Sun Flash Federal #1 lies in the Green River Basin (East and South) with the Fort Union (9000') and Dakota (15000') sands highlighted. Phillips has injected produced water into the Fort Union for years and the Dakota sand contains hydrocarbons within several miles of the Flash location.

A drilling report is also enclosed indicating the 9 5/8 surface casing in the Flash was set at 5007' and cement was circulated to surface.

If I can be of any additional help in preparation for the scheduled August 25 hearing date, please call me at (303) 696-3514.

Sincerely,

SUN EXPLORATION AND PRODUCTION COMPANY


Earl B. Claiborne, Jr.

EBC:rc

Enclosures

cc: Nick Adams
Tom Golden
Rita Monroe Galvin
Rickie Morgan

EX REGION : NORTHERN
*** INITIALDISTRICT : ROCKY MOUNTAINS-WEST15,900/ EW/ 9 5/8 CS @ 5007/ DAKOTA/ GRACE #269/ SUMMIT, UTAH/ PROP # 00
530740/ 14-17D R I L L I N G / ACTIVE08/15/87

*** FIRST REPORT ***

08/14/87 SULLIVAN RAT HOLE SETTING CONDUCTOR 8-13-8708/15/87 FINISH CONDUCTOR HOLE/ HAD TO MUD UP/ SET 60' OF 16" CONDUCTOR
CMT'D W/REDI MIX08/16/87

SD FOR RAINY WET WEATHER

08/17/87

BUILDING CELLAR AND PREPARE TO MIRU

08/18/87

PREP TO MIRU

08/19/87

LOCATION READY FOR MIRU/ GRACE WAITING ON TRUCK AVAILABILITY

08/20/87

GRACE WAITING ON TRUCK AVAILABILITY

08/21/87

GRACE WAITING ON TRUCK AVAILABILITY

08/22/87

GRACE WAITING ON TRUCK AVAILABILITY

08/23/87

GRACE WAITING ON TRUCK AVAILABILITY

08/24/87

WILL START MIR TODAY

08/25/87

MOVE IN AND RIG UP GRACE 269

08/26/87

MOVE IN & RIG UP GRACE 269

08/27/87

MOVE IN AND RIG UP GRACE 269

08/28/87

MOVE IN AND RIG UP GRACE 269

08/29/87

RIGGING UP GRACE #269

08/30/87

RIGGING UP GRACE #269

08/31/87205/ DRLG/ SH & BOULDERS/ 125/ MW FW/ GRACE RU/ SPUD SURFACE HOLE @ 3 AM8-31-87/ BCP-\$129,09209/01/87800/ DRLG/ SH & SD & CLAY/ 595/ MW 8.9 VIS 35/ ENCOUNTERED GRAVEL F/277-305/
HAD TO MUD UP TO CLEAN HOLE/ BCP-\$136,33609/02/872120/ DRLG/ GREEN RIVER/ SD & SH/ 1320/ MW 9.0 VIS 30/ GRND ELEV 8732.6/ DRK
FLOOR 8758.1/ KELLY BUSHING 8759.6/ BCP-\$142,171

09/03/87

2190/ CIRC & RAISE VISCOSITY/ SD & SH/ 70/ MW 9.0 VIS 30/ TRIP F/BIT @ 2190/ LEFT ONE CONE IN HOLE/ WAIT ON & TIH W/11" MAGNET/ WORK TIGHT HOLE @ 955 & 1460 & 1970-2136/ BECAME STUCK @ 2136/ RAISE VIS & WORK FREE/ POH W/MAGNET PU 12 1/4 BIT & TIH/ HAD BRIDGES @ 524 & 1440/ W&R F/2110-2190/ CIRC & RAISE VISCOSITY/ BCP-\$149,289

09/04/87

2190/ TOH W/GLOBE BASKET/ SURFACE/ O/ MW 9.2 VIS 40/ CIRC & RAISE VISC/ TOH/ PU 12" MAGNET/ TIH WASH & REAM 1100-1160/ FIH TIH TO TD/ TOH/ MAGNET SKIRT FULL OF SOFT GUMBO/ PU 12" GLOBE BASKET/ TIH/ WASH TO BTM/ CUT OVER 10'/ TOH/ BCP-\$156,033

09/05/87

2251/ DRLG/ SD & SH/ 61/ MW 9.2 VIS 50/ GLOBE BASKET WAS FULL OF SHALE/ TIH W/11 1/2 JUNK MILL/ MILL ON BTM 1/2 HR/ TOH MILL WORE OUT/ TIH W/GLOBE BASKET AND CUT OVER CONE ON BTM/ TOH/ REC CONE/ TIH W/12 1/4 BIT/ BCP-\$163,430

09/06/87

2763/ DRLG/ BENTONITE/ 512/ MW 9.5 VIS 49/ BCP-\$170,484

09/07/87

3152/ DRLG/ BENTONITE & SH/ 389/ MW 9.6 VIS 48/ BCP-\$183,998

09/08/87

3631/ DRLG/ SD & SH/ 479/ MW 9.4 VIS 41/ BCP-\$191,266

09/09/87

3985/ DRLG/ SH & SD/ 354/ MW 9.4 VIS 46/ BCP-\$207,355

09/10/87

4372/ DRLG/ SH/ 387/ MW 9.5 VIS 54/ BCP-\$216,066

09/11/87

4798/ DRLG/ SH/ 426/ MW 9.4 VIS 42/ BCP-\$229,821

09/12/87

5010/ CIRC F/CSG/ SURF/ 212/ MW 9.4 VIS 46/ DRILL TO CSG POINT/ CIRC & MADE SHORT TRIP TO SURFACE/ TIH & CIRC F/CSG/ BCP-\$236,501

09/13/87

5010/ WOC/ SURFACE/ O/ MW FW/ RAN 117 JTS 9 5/8 40# K-55 LT&C CSG/ CS @ 5007/ FC @ 4923/ DV @ 2021/ HOWCO CMT'D 1ST STAGE W/700 SX LITE W/3% CACL & 1/4#/SX FLOCELE/ TAILED W/300 SX CLASS G W/1/4#/SX FLOCELE/ DID NOT BUMP PLUG/ OPEN DV & CIRC 4 HRS W/NO CEMENT TO SURF/ CMT 2ND STAGE W/1200 SX LITE W/3% CACL & 1/4#/SX/FLOCELE/ TAILED W/200 SX CLASS A W/1% CSCL & 1/4#/SX FLOCELE/ CIRC 80 SX EXCESS CMT TO SURF/ HAD GOOD RETURNS ENTIRE JOB/ FP 800# CLOSE DV W/1200#/ FLOAT HELD/ JC @ 3:00 AM/ BCP-\$397,303

09/14/87

5010/ PRESS TEST BOP'S/ SURFACE/ O/ WOC/ CUT OFF & WELD ON HEAD/ NU BOP'S/ PRESS TEST BOP'S & VALVES & MANIFOLD TO 5000#/ BCP-\$410,939

09/15/87

5138/ TRIP F/BIT/ SH/ 128/ MW 8.6 VIS 27/ FINISH TEST BOP'S/ CONTACTED TERESA THOMPSON W/UTAH BLM BUT NO ONE WITNESSED TEST/ TIH & DRILL DV & FC & CMT & CS/ PRESS TEST CSG TO 1500#/ BCP-\$426,655

09/16/87

5630/ DRLG/ SD & SH/ 492/ MW 8.6 VIS 27/ FINISH TRIP F/BIT/ BCP-\$436,908

09/17/87

5960/ DRLG/ SD & SH/ 330/ MW 8.5 VIS 27/ BCP-\$443,945

09/18/87

6510/ DRLG/ SD & SH/ 550/ MW 8.6 VIS 28/ BCP-\$452,807




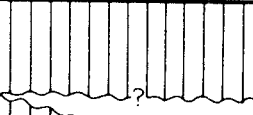
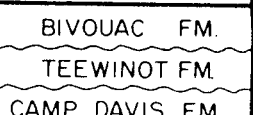
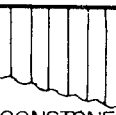
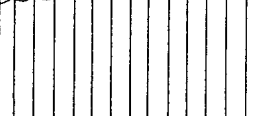
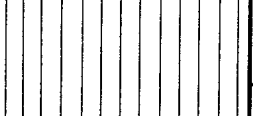

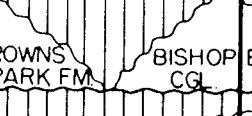
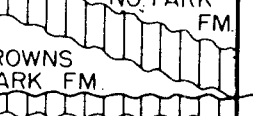

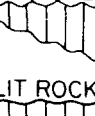
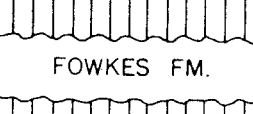


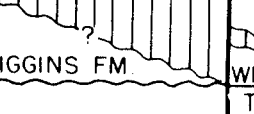
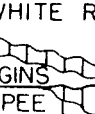
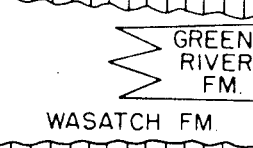
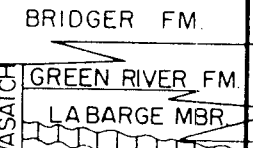
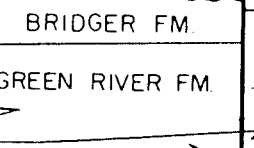
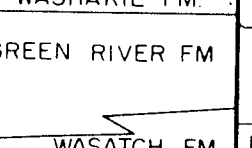

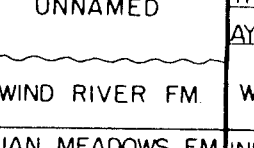
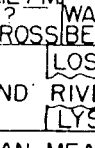
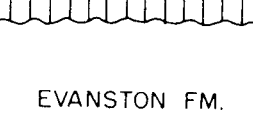

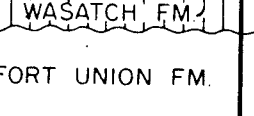
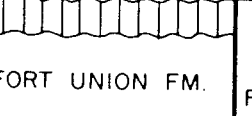

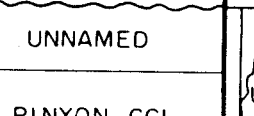
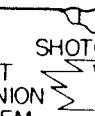

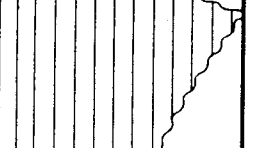
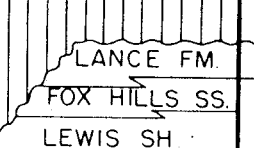
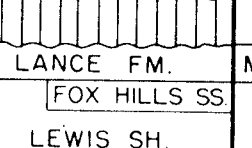
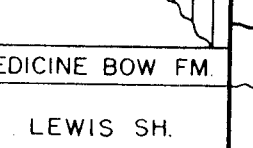
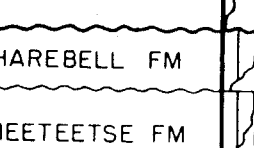

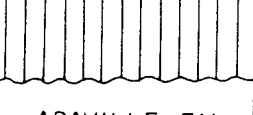
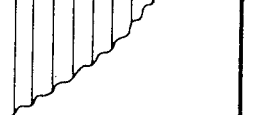
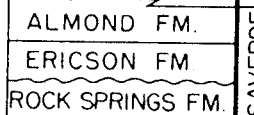
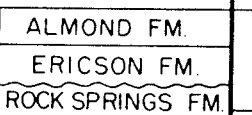
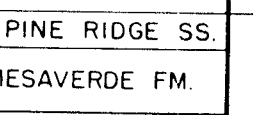
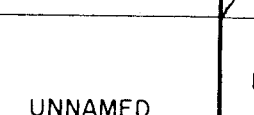
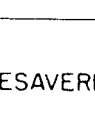
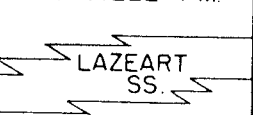
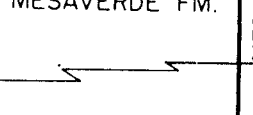
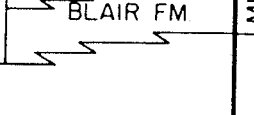
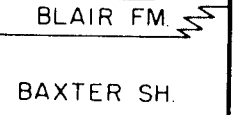
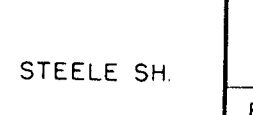
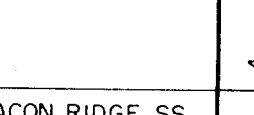
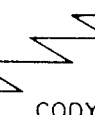
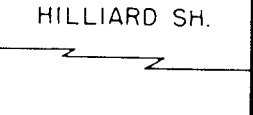
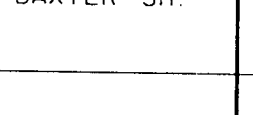
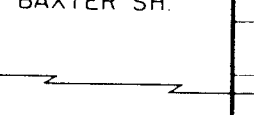
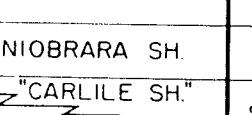
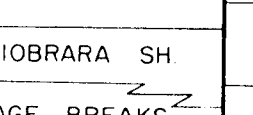
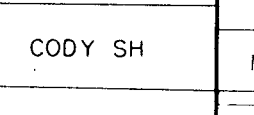
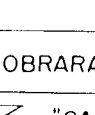

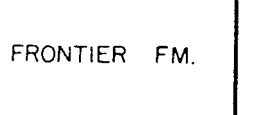
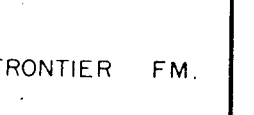
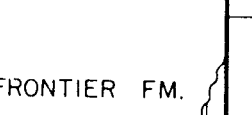
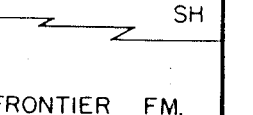
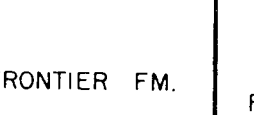

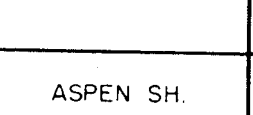
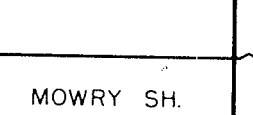
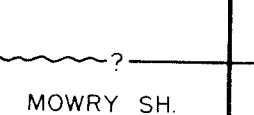
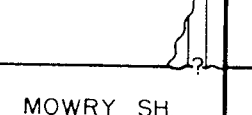
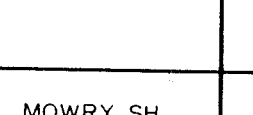
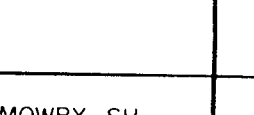
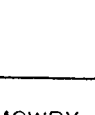
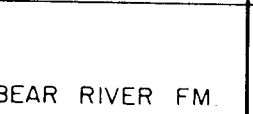
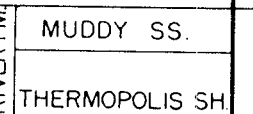
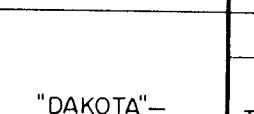
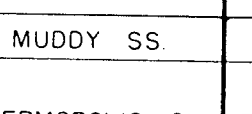
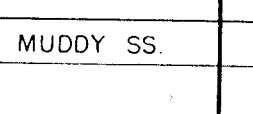
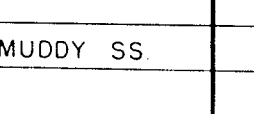
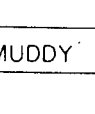
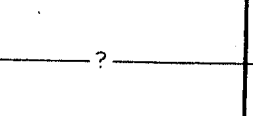
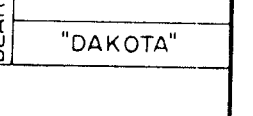

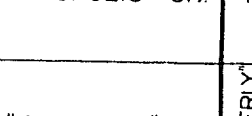
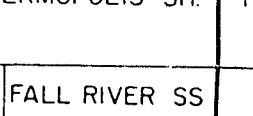
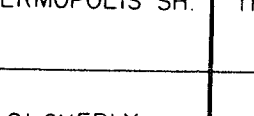
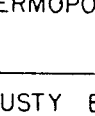
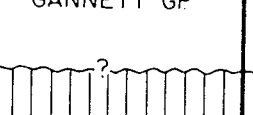
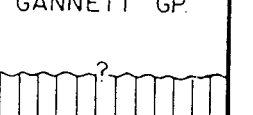
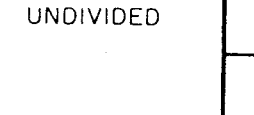
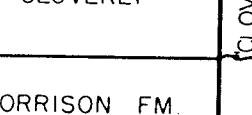
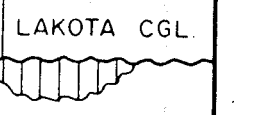
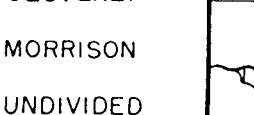

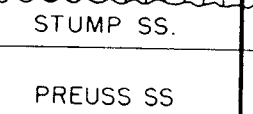
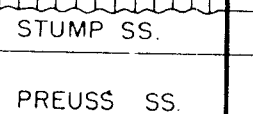
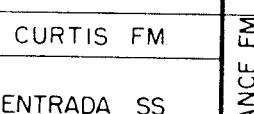
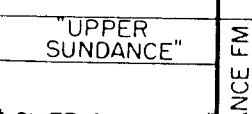
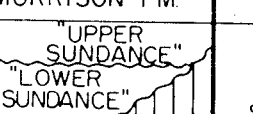
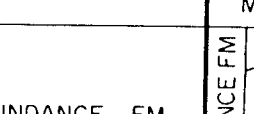
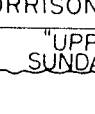
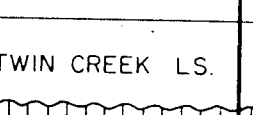
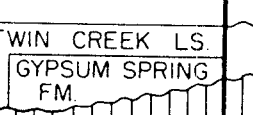

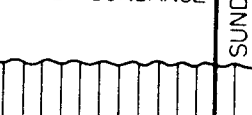


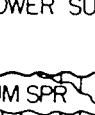
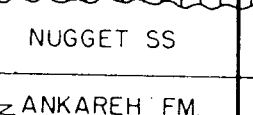
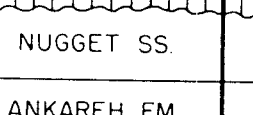
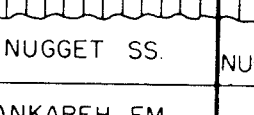
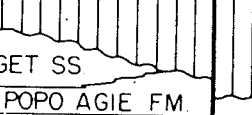

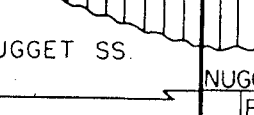
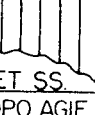
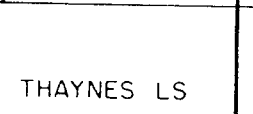
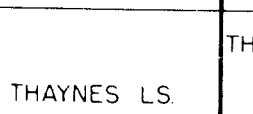
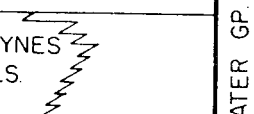
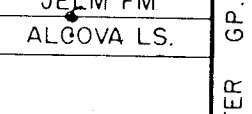
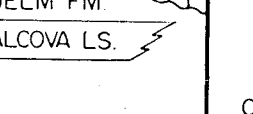

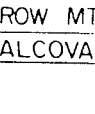
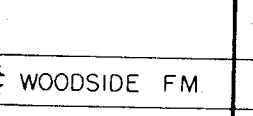
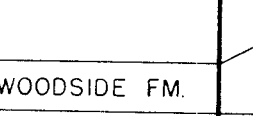
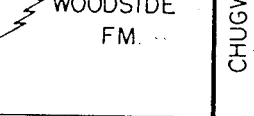
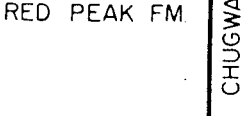
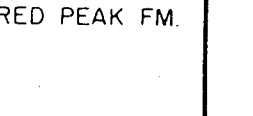

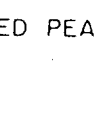
09/19/87

6566/ TIH W/BIT/ SD & SH/ 56/ MW 8.6 VIS 27/ TRIP F/BIT/ HAD LOST 1 CONE/ W.O. & TRIP IN W/MAGNET/ MADE 2 TRIPS W/MAGNET/ REC CONE ON 2ND TRIP/ TIH

WYOMING STRATIGRAPHIC NOMENCLATURE

	WYOMING OVERTHRUST BELT	GREEN RIVER BASIN		RAWLINS UPLIFT GREAT DIVIDE- WASHAKIE BSN.	LARAMIE, HANNA, SHIRLEY BASINS	NORTHWEST WYOMING	WIND BASIN
		NORTH AND WEST	EAST AND SOUTH				
PLIOCENE	FOWKES FM.	UNNAMED BEDS CAMP DAVIS FM.				BIVOUAC FM. TEEWINOT FM. CAMP DAVIS FM.	MOONSTON
MIOCENE					NO. PARK FM.	COLTER FM.	SPLIT ROC
OLIGOCENE	FOWKES FM.		BROWNS PARK BISHOP CGL.	BROWNS PARK FM.	BROWNS PARK FM.	WIGGINS FM.	WHITE
EOCENE		BRIDGER FM.	BRIDGER FM.	WASHAKIE FM.	WHITE RIVER FM.	UNNAMED	WIGGINS
	GREEN RIVER FM.	GREEN RIVER FM.	GREEN RIVER FM.	GREEN RIVER FM.	WIND R.	WIND RIVER FM.	TEPEE TRAIL FM.
PALEOCENE	WASATCH FM.	LABARGE MBR.	WASATCH FM.	WASATCH FM.	HANNA FM.	INDIAN MEADOWS FM.	AYCROSSIE
	EVANSTON FM.	CHAPPO MBR. HOBACK FM.	FORT UNION FM.	FORT UNION FM.	FERRIS FM.	UNNAMED	FT. UNION FM.
UPPER CRETACEOUS			LANCE FM.	LANCE FM.	MEDICINE BOW FM.	HAREBELL FM.	SHC
			FOX HILLS SS.	FOX HILLS SS.			LO
			LEWIS SH.	LEWIS SH.	LEWIS SH.	MEETEETSE FM.	MEETEE
			ALMOND FM.	ALMOND FM.	PINE RIDGE SS.		
			ERICSON FM.	ERICSON FM.	MESAVERDE FM.	UNNAMED	MESAVERDE
	ADAVILLE FM.	MESAVERDE FM.	ROCK SPRINGS FM.	ROCK SPRINGS FM.			
			BLAIR FM.	BLAIR FM.			
	LAZEART SS.			BAXTER SH.	STEELE SH.	BACON RIDGE SS.	COC
	HILLIARD SH.	BAXTER SH.	BAXTER SH.	NIOBRARA SH.	NIOBRARA SH.	CODY SH.	NIOBRARA
	FRONTIER FM.	FRONTIER FM.	FRONTIER FM.	"CARLILE SH."	SAGE BREAKS SH.	FRONTIER FM.	"C
LOWER CRETACEOUS	ASPEN SH.	MOWRY SH.	MOWRY SH.	MOWRY SH.	MOWRY SH.	MOWRY SH.	MOWRY
	BEAR RIVER FM.	BEAR RIVER FM. MUDDY SS. THERMOPOLIS SH. "DAKOTA"	"DAKOTA"- MORRISON UNDIVIDED	MUDDY SS. THERMOPOLIS SH.	MUDDY SS. THERMOPOLIS SH.	MUDDY SS. THERMOPOLIS SH.	MUDDY THERMOPOLIS
	GANNETT GP.	GANNETT GP.		"CLOVERLY"	FALL RIVER SS. LAKOTA CGL.	CLOVERLY- MORRISON UNDIVIDED	RUSTY "CLOVE MORRISON
	STUMP SS.	STUMP SS.	CURTIS FM.	MORRISON FM.	MORRISON FM.		
UPPER MIDDLE LOWER	PREUSS SS.	PREUSS SS.	ENTRADA SS.	"UPPER SUNDANCE" "LOWER SUNDANCE"	"UPPER SUNDANCE" "LOWER SUNDANCE" BASAL SUNDANCE	SUNDANCE FM.	SUNDANCE FM.
	TWIN CREEK LS.	TWIN CREEK LS. GYPSUM SPRING FM.	CARMEL FM.			GYPSUM SPRING FM.	GYPSUM SPR
	NUGGET SS.	NUGGET SS.	NUGGET SS.			NUGGET SS.	

WYOMING STRATIGRAPHIC NOMENCLATURE

		WYOMING OVERTHRUST BELT	GREEN RIVER BASIN		RAWLINS UPLIFT GREAT DIVIDE- WASHAKIE BSN.	LARAMIE, HANNA, SHIRLEY BASINS	NORTHWEST WYOMING	WIND RIVER BASIN
TERTIARY	PLIOCENE							
	MIOCENE							
	OLIGOCENE							
	EOCENE							
	PALEOCENE							
UPPER CRETACEOUS								
								
								
								
								
JURASSIC	UPPER							
								
	MIDDLE							
								
	LOWER							
TRIASSIC								
								
PERMIAN								
								



Norman H. Bangerter

Governor

Dee C. Hansen

Executive Director

Dianne R. Nielson, Ph.D.

Division Director

State of Utah

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING

355 West North Temple

3 Triad Center, Suite 350

Salt Lake City, Utah 84180-1203

801-538-5340

DATE: August 18, 1988

TO: File

FROM: Gil Hunt 

RE: Sun Exploration, Docket No. 88-014, Cause No. WD-103

On August 15, 1988, I received a phone call from Mr. Michael Strieby of EPA regarding the aquifer exemption requested by Sun Exploration and Production Company. He requested additional information to assist EPA in making a determination as to the approval requested by Sun. EPA's approval of aquifer exemptions is necessary according to rule R615-5-4, Oil and Gas Conservation General Rules.

Mr. Strieby requested information concerning confining layers and underground sources of drinking water (USDW's) above the proposed injection interval. He said he would like a stratigraphic section showing position of USDW's and confining layers. He also requested information concerning the cementing of the surface casing in the Flash Federal well including a cement bond log, if one existed.

I relayed EPA's requested to Sun by phone conversation with Mr. Earl Claiborne on August 16, 1988. Mr. Claiborne said he would provide the information.

tc

0310U/63



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2405

AUG 26 1988

RECEIVED
AUG 30 1988

Ref: 8WM-DW

Gil Hunt
UIC Program Manager
Division of Oil, Gas, and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1204

DIVISION OF
OIL, GAS & MINING

Re: Aquifer Exemption
Docket No. 88-014
Cause No. WD-103

Dear Mr. Hunt:

We have reviewed the application by Sun Exploration and Production Company for an aquifer exemption to inject into the Dakota Formation using the Flash Federal #1. The Dakota Formation at this location has a reported TDS value of 9,872 mg/l and would qualify as an underground source of drinking water (USDW).

Based on the information supplied by Sun, the Dakota Formation is not currently used as a USDW and will not in the future because of depth and location. EPA would concur in a Board action to exempt the Dakota Formation in the Flash Federal #1 from protection as a USDW in order to allow injection. This concurrence was communicated by phone on August 24, 1988.

If you have any questions, please call Mike Strieby at (303) 293-1415.

Sincerely,

Max H. Dodson
Director
Water Management Division

**FORTUNE OIL LTD.
1245 EAST BRICKYARD ROAD, SUITE 30
SALT LAKE CITY, UTAH 84106
(801) 485-7797**

RECEIVED
SEP 19 1988

September 16, 1988

**DIVISION OF
OIL, GAS & MINING**

State of Utah
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

RE: Hearing August 25, 1988
(Continued to September 22, 1988)
Docket No. 88-014
Cause No. WD-103

Gentlemen:

Subject hearing, now scheduled for September 22, 1988, is to consider the application of Sun Exploration and Production Company requesting approval of the Board of Oil, Gas and Mining for an aquifer exemption for the Dakota formation and approval to convert to a water disposal well the Flash Federal No. 1 well in Section 18, Township 3 North, Range 15 East, Summit County, Utah.

Fortune Oil Ltd. hereby respectfully requests that the hearing now scheduled for September 22, 1988 be delayed until the next meeting of the board in October, 1988. Our reasons for this request are as follows:

1. A correlative rights problem exists affecting the interests of owners of Federal leases located in the southern portion of the Luckey Ditch Unit lying directly north of and adjoining the tract upon which the Flash No. 1 Federal well was completed and the Bureau of Land Management is presently considering a request of the Unit Operator to include certain of these lands in the unit participating area. We do not believe that this matter will be resolved satisfactorily by September 22, 1988.
2. Mr. Keith Hebertson, a petroleum engineer of Salt Lake City, who serves on the Luckey Ditch Unit Technical Committee, which committee has been involved in a study of the producing formation in this unit, and who will represent Fortune

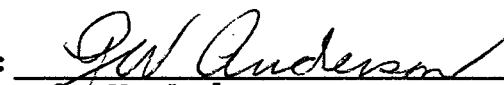
DIVISION OF OIL, GAS AND MINING
SEPTEMBER 16, 1988
PAGE TWO

Oil Ltd. at the hearing is unavailable to attend the hearing
on September 22, 1988.

Your consideration and approval of this request will be greatly
appreciated.

Respectfully yours,

FORTUNE OIL LTD.
BY: K & J INVESTMENT COMPANY
GENERAL PARTNER

BY: 
G. W. Anderson
Vice President

GWA:kw
File:Flash.sep

cc: Sun Exploration & Production Co.
Chieftain International Inc.
General Atlantic Energy Corp.
Mr. Alan Enke, Attorney for Applicant



CHIEFTAIN INTERNATIONAL INC.

1201 TORONTO DOMINION TOWER, EDMONTON CENTRE, EDMONTON, ALBERTA, CANADA T5J 2Z1
TELEPHONE (403) 425-1950 TELECOPIER 429-4681 TELEX 037-3499

DELIVERED BY COURIER

September 15, 1988

State of Utah
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

RECEIVED
SEP 19 1988

OIL, GAS AND MINING

Gentlemen:

Re: September 22, 1988 Hearing
Docket No. 88-014
Cause No. WD-103

The subject hearing is to consider the application of Sun Exploration and Production Company requesting an Aquifer Exemption for the Dakota formation and authorization of the conversion to a water disposal well for the Flash Federal No. 1 well in Section 18, Township 3 North, Range 15 East, Summit County, Utah.

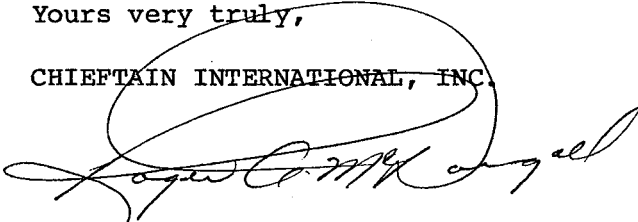
Chieftain International, Inc. hereby respectfully requests that the hearing currently scheduled for September 22, 1988 be delayed until the next board meeting held during the month of October, 1988. This request is made for the following reasons:

1) A correlative rights issue exists with the lease holders in acreage included in the Luckey Ditch Unit located immediately north of the Flash Federal well. The BLM is presently considering a request to include certain lands in the participating area of the unit in an effort to resolve the issue. It is unlikely the outcome of this request will be known prior to September 22, 1988.

2) Our expert witness, Keith Hebertson, Petroleum Engineer, located in Salt Lake City, Utah is unable to attend the hearing presently scheduled for September 22, 1988.

Yours very truly,

CHIEFTAIN INTERNATIONAL, INC.


R. A. McDougall
Vice President, Land

SK/jh

cc: Sun Exploration and Production Company
Fortune Oil Ltd.
General Atlantic Energy Corporation
Alan A. Inke, Attorney for the Applicant

GENERAL ATLANTIC

ENERGY CORPORATION

September 19, 1988

RECEIVED
SEP 19 1988

DIVISION OF
OIL, GAS & MINING

State of Utah
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, UT 84108-1203

Re: Docket 88-014, Cause #WD-103
Sun Exploration Hearing

Gentlemen:

We have received notice of the continuance of referenced hearing to September 22, 1988, however, due to extenuating circumstances, for reasons listed below, General Atlantic Energy Corporation respectfully requests that you grant an additional continuance of this hearing.

There is currently a proposal up before the Bureau of Land Management for decision in the matter of protection of correlative rights of the leasehold owners in USA lease(s) covering lands which are included within the boundaries of a Federal Exploratory Unit and which are immediately adjacent to the north of the Flash Federal well. Until this matter is resolved and a decision is rendered by the Bureau of Land Management which will allow the affected lands to participate in existing production, General Atlantic must continue to oppose the approval of Sun's request. General Atlantic claims that approval of Sun's request prior to satisfactory resolution of the matter currently up before the Bureau of Land Management would infringe upon the correlative rights of the adjacent leasehold owners.

In light of the above and due to the fact that the primary technical witness for General Atlantic and its joint owners will be unavailable for the scheduled September 22, 1988 hearing, we request that you grant the continuance of referenced hearing.



We thank you for your cooperation thusfar.

Very truly yours,

GENERAL ATLANTIC ENERGY CORPORATION

A handwritten signature in dark ink, appearing to read "G. K. McGregor", is written over the typed name.

Gary McGregor
Senior Vice President
Acquisitions and Engineering

MLB/GM/idi

cc: Sun Exploration and Production Company
Chieftain International, Inc.
Fortune Oil Ltd.
Alan A. Inke, Attorney for the Applicant

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER ☐

2. NAME OF OPERATOR

Sun Exploration and Production Company

3. ADDRESS OF OPERATOR

PO Box 26300

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also space 17 below.)
At surface

900 'FSL & 2600' FWL (NESW)

14. PERMIT NO.

43-043-30282

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

8733 GR

5. LEASE DESIGNATION AND SERIAL NO.

U-27918

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Flash Federal

9. WELL NO.

#1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec. 18-3N-15E

12. COUNTY OR PARISH 13. STATE

Summit

Utah

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other) NTL 28

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

NTL 28

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Purpose of this Sundry is to request permission to dispose of water from the following wells into the Flash Federal No. 1:

Listing Attached

These wells produce approximately a total of 748 BBls of water a day. Attached is a lease plat and water analysis.

CONFIDENTIAL

APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

DATE: 12-6-88

BY: [Signature]

well approved 9-26-88
for disposal.

18. I hereby certify that the foregoing is true and correct

SIGNED

[Signature]

TITLE

Accountant

DATE

11/21/88

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

Federal Approval of this
Action is Necessary

*See Instructions on Reverse Side

PHILLIPS PETROLEUM COMPANY
Bridger Lake Unit
Summit County, Utah

<u>Well</u>	<u>Location</u>	<u>Estimated BWP Production</u>
1	NW SW Sec. 25	40
2	NW SE Sec. 26	25
3	NW NW Sec. 25	145
4	NW NW Sec. 26	50
6	SW NW Sec. 23	0
7	SW SE Sec. 24	10
8	SW NW Sec. 36	50
10	NW SE Sec. 14	0
13	SW NE Sec. 35	10
14	SW NE Sec. 25	20
		<u>350 BWP</u>

SUN EXPLORATION & PRODUCTION COMPANY
Luckey Ditch Unit
Summit County, Utah

1	SW NW Sec. 16	20
2	NW NW Sec. 22	50
3	NE NW Sec. 20	9
4	NW NW Sec. 19	120
5	NW NW Sec. 9	5
6	SE NE Sec. 21	140
7	NW NW Sec. 15	20
8	SE NW Sec. 10	26
9	SE NW Sec. 8	1
11	SW NE Sec. 18	7
		<u>398</u>

SUN Sun Exploration and Production Company
Rocky Mountain District

LUCKEY DITCH - FLASH
UINTA CO., WYOMING
SUMMIT CO., UTAH

SCALE: 1" = 2000' DATE: 4/88

T
3
N

**Sun Exploration and
Production Company
Rocky Mountain District**

LUCKEY DITCH-FLASH
UINTA CO., WYOMING
SUMMIT CO., UTAH

SCALE: 1" = 2000' DATE: 4/88

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN THE
(Other instruct
verse side)

CATE*
on re-

Budget Bureau No. 1004-0135
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.

U-27918

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Flash Federal

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

Sec. 18-3N-15E

12. COUNTY OR PARISH

Summit

13. STATE

Utah

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR

Sun Exploration & Production Co.

3. ADDRESS OF OPERATOR

P.O. Box 26300, OKC., OK 73126-0300

4. LOCATION OF WELL (Report location clearly and in accordance with any applicable regulations.)
See also space 17 below.)
At surface

900' FSL & 2600' FWL

RECEIVED
MAR 20 1989

DIVISION OF
OIL, GAS & MINING

14. PERMIT NO.

43-043-30282

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

8733' GR

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other) Converted to SWD

(Note: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Well began disposal 10/6/88

140 BBLS water per day

-0- PSI

on Vacuum

CONFIDENTIAL

18. I hereby certify that the foregoing is true and correct

SIGNED

Carol J. Mezger

TITLE

Accountant

DATE

3/15/89

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

[illegible]



CORE LABORATORIES

CORE ANALYSIS RESULTS

for

Sun Exploration and Production Company

Flash Federal No. 1 Well

Wildcat

Summit County, Utah

File Number: 57122-7277

43-043-30282

CONFIDENTIAL

These analyses, opinions, or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgement of Core Laboratories (all errors and omissions excepted), but Core Laboratories and its officers and employees, assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitability of any oil, gas, or other mineral or sand in connection with which such report is used or relied upon.

UN EXPL. & PROD. CO.
LASH FEDERAL #1
ILDCAT
UMMIT COUNTY, UTAH

DATE : 27-NOV-87
FORMATION : DAKOTA
DRLG. FLUID: WATER BASE MUD
LOCATION : SEC. 18, T3N, R15E.

FILE NO : 57122-7277
ANALYSTS : SS/DF
ELEVATION: 8766 KB

CONVENTIONAL CORE ANALYSIS--BOYLE'S LAW POROSITY

SAMPLE NUMBER	DEPTH	PERM K _a MAXIMUM	POR. H _e	FLUID SATS. OIL WTR	GRAIN DEN	DESCRIPTION
CORE NO. 1 15225.0-15257.0 CUT 32.0', REC. 31.0'						
1	15225.0-26.0	0.31	4.8	0.0 38.2	2.64	SS, GY VFG SHLY
2	15226.0-27.0	0.62	3.8	0.0 51.9	2.63	SS, GY VFG SHLY
3	15227.0-28.0	0.09	4.4	0.0 42.3	2.62	SS, GY VFG SHLY
4	15228.0-29.0	0.02	4.7	5.8 65.5	2.64	SS, LTGY VF-FG SHLY
5	15229.0-30.0	0.04	4.6	0.0 63.7	2.65	SS, LTGY VF-FG CNGL
6	15230.0-31.0	0.63	5.5	0.0 30.3	2.65	SS, LTGY VF-FG CNGL
7	15231.0-32.0	0.74	5.0	11.1 51.7	2.62	SS, LTGY VF-FG CARB
8	15232.0-33.0	0.94	5.3	14.9 52.9	2.62	SS, LTGY VF-FG CARB
9	15233.0-34.0	2.04	7.1	0.0 32.4	2.60	SS, LTGY VF-MG CARB
10	15234.0-35.0	0.17	5.2	0.0 53.5	2.64	SS, LTGY VF-CG
11	15235.0-36.0	0.87	5.5	11.6 46.2	2.70	SS, LTGY VF-CG CNGL PYR
12	15236.0-37.0	1.46	6.7	13.3 53.2	2.64	SS, LTGY VF-MG SHLY
13	15237.0-38.0	2.11	4.2	0.0 74.0	2.64	SS, LTGY VFG SHLY
14	15238.0-39.0	178.	17.9	8.7 53.0	2.64	SS, LTBRN FG-MG HF
15	15239.0-40.0	338.	19.6	11.2 53.8	2.64	SS, LTBRN M-CG
16	15240.0-41.0	42.	18.2	11.3 48.3	2.64	SS, LTBRN F-CG
17	15241.0-42.0	94.	18.5	0.0 79.1	2.64	SS, LTBRN F-CG CNGL
18	15242.0-43.0	75.	17.5	2.3 52.3	2.63	SS, LTBRN VF-CG CARB
19	15243.0-44.0	37.	17.4	0.0 73.6	2.64	SS, LTBRN F-CG
20	15244.0-45.0	88.	16.0	0.0 56.2	2.64	SS, LTBRN F-MG
21	15245.0-46.0	15.	16.1	0.0 55.8	2.64	SS, LTBRN F-MG
22	15246.0-47.0	22.	17.4	0.0 78.0	2.64	SS, LTBRN F-MG
23	15247.0-48.0	64.	14.4	0.0 81.9	2.64	SS, LTBRN F-MG
24	15248.0-49.0	78.	14.8	0.0 86.5	2.65	SS, LTBRN F-MG
25	15249.0-50.0	144.	14.8	0.0 88.5	2.64	SS, LTBRN F-MG

04/27 10:54

SUN E&P 2148914489

#02

SUN EXPL. & PROD. CO.
FLASH FEDERAL #1

DATE : 27-NOV-87
FORMATION : DAKOTA

FILE NO. : 57122-7277
ANALYSTS : SS

*** CORE SUMMARY AVERAGES FOR 1 ZONE ***

DEPTH INTERVAL: 15225.0 TO 15262.0

FEET OF CORE ANALYZED : 36.0 FEET OF CORE INCLUDED IN AVERAGES: 36.0

-- SAMPLES FALLING WITHIN THE FOLLOWING RANGES WERE AVERAGED --

PERMEABILITY HORIZONTAL RANGE (MD.)	:	0.00 TO 350.	(UNCORRECTED FOR SLIPPAGE)
HELIUM POROSITY RANGE (%)	:	0.0 TO 100.0	
OIL SATURATION RANGE (%)	:	0.0 TO 100.0	
WATER SATURATION RANGE (%)	:	0.0 TO 100.0	

SHALE SAMPLES EXCLUDED FROM AVERAGES.

AVERAGES FOR DEPTH INTERVAL: 15225.0 TO 15262.0

AVERAGE PERMEABILITY (MILLIDARCIES)

ARITHMETIC PERMEABILITY	:	44.
GEOMETRIC PERMEABILITY	:	8.0
HARMONIC PERMEABILITY	:	0.34

PRODUCTIVE CAPACITY (MILLIDARCY-FEET)

ARITHMETIC CAPACITY	:	1582.
GEOMETRIC CAPACITY	:	290.
HARMONIC CAPACITY	:	12.

AVERAGE POROSITY (PERCENT)	:	11.6
----------------------------	---	------

AVERAGE TOTAL WATER SATURATION (PERCENT OF PORE SPACE)	:	68.0
---	---	------

AVERAGE RESIDUAL OIL SATURATION (PERCENT OF PORE SPACE)	:	2.3
--	---	-----

N EXPL. & PROD. CO.
ASH FEDERAL #1

DATE : 27-NOV-87
FORMATION : DAKOTA

FILE NO : 57122-7277
ANALYSTS : SS/DF

CONVENTIONAL CORE ANALYSIS--BOYLE'S LAW POROSITY

MPLE MBER	DEPTH	PERM K _a MAXIMUM	POR. H _e	FLUID OIL	SATS. WTR	GRAIN DEN	DESCRIPTION
26	15250.0-51.0	17.	12.5	0.4	75.4	2.64	SS, LTBRN F-MG
27	15251.0-52.0	79.	13.7	0.0	79.2	2.64	SS, LTBRN F-MG
28	15252.0-53.0	66.	14.4	0.0	65.3	2.64	SS, LTBRN F-MG
29	15253.0-54.0	38.	14.1	0.2	78.1	2.64	SS, LTBRN F-MG
30	15254.0-55.0	14.	10.1	0.0	71.3	2.64	SS, LTBRN F-MG
31	15255.0-56.0	23.	13.7	0.3	76.2	2.64	SS, LTBRN F-MG
	15256.0-57.0						LOST CORE
CORE NO. 2; 15257.0-15287.0 CUT 30.0', REC. 5.0'							
32	15257.0-58.0	80.	14.8	0.7	83.0	2.64	SS, LTBRN F-CG
33	15258.0-59.0	40.	14.0	0.0	80.9	2.64	SS, LTBRN F-CG
34	15259.0-60.0	23.	14.2	0.0	81.3	2.64	SS, LTBRN F-MG
35	15260.0-61.0	10.	13.9	0.3	87.3	2.64	SS, LTBRN F-MG
36	15261.0-62.0	6.52	12.2	0.0	83.9	2.64	SS, LTBRN F-MG
	15262.0-87.0						LOST CORE

LABORATORY COPY

Cause No. WD-103
Docket No. 88-014
Exhibit No. 9

SUN 5434

SUN PRODUCTION COMPANY

WATER ANALYSIS REPORT

ANALYSIS NO. E-4912

PRODUCTION SERVICE LABORATORY

FILE _____

Operator SUN E & P *530740*Lease or Well FLASH FEDERAL #1Formation DAKOTAPerfs 15792 To 15822 ; I.D. _____Method of Collecting Sample FLASH FEDERAL 1
WELLHEAD

Treatment _____

Date of last acid job _____

District ROCKY MOUNTAINField WILDCATCounty SUMMITState UTAH

Collected by _____

Date 04/18/8804/25/88

Collected

Analyzed

Sample No. 53312Analyst ERW PPI _____

Total Prod.

BOPD

BWPD

MCFPD

Description of Sample 1 PINT CLOUDY LIQUID WITH BLACK SEDIMENT

CONSTITUENTS	ppm
Sodium	<u>3520</u>
Calcium	<u>36</u>
Magnesium	<u>4</u>
Barium	<u>0</u>
Strontium	_____
Potassium	_____
Iron	<u>56</u>
Chloride	<u>4540</u>
Sulfate	<u>276</u>
Carbonate	<u>0</u>
Bicarbonate	<u>1440</u>
_____	_____
_____	_____
_____	_____
_____	_____
TOTAL DISSOLVED SOLIDS	<u>9872</u>

OTHER PROPERTIES

pH	<u>7.4</u>
Specific Gravity	<u>1.0080</u>
Resistivity ohm-mtr. @ 75 F	<u>0.6622</u>
Loss on Ignition, ppm	_____
Total Solids by Evap., ppm	_____
Organic acids, ppm	_____
Hardness as CaCO ₃ , ppm	_____
Sulfide	<u>ABSENT</u>
Mixed Oxides (Qualitative)	_____
Fluoride, ppm	_____
Silica, ppm	_____
Total Iron, ppm	<u>849</u>
Nitrates, ppm	_____
Phosphate, ppm	_____
_____	_____
_____	_____

REMARKS:

Swab sample from new completion.
Analysis requested for record. This
sample may contain some residual
completion fluids but does appear to
be more representative of formation
water than the companion 4/16/88
sample.

REPORTED BY:

Fred Eisen

CHEMICAL ENGINEERING SECTION

Copies to:

Bob Barman - NPIV 1125
Danny Bell - CCII 414
Chip Claiborne - Denver
Pete Dellinger
Rita Monroe Galvin - Denver
Tom Golden - Denver
Pat Phelan
Jim Schneider - Denver
Steve Stearns - Denver
File

3260, 40,

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	5. LEASE DESIGNATION AND SERIAL NO. U-27918
2. NAME OF OPERATOR Oryx Energy Company	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR P.O. Box 26300, Okla. City, OK 73126-0300	7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 900' FSL & 2600' FWL	8. FARM OR LEASE NAME Flash Federal
14. PERMIT NO. 43-043-30282	9. WELL NO. 1
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data	10. FIELD AND POOL, OR WILDCAT Wildcat
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 18-3N-15E
	12. COUNTY OR PARISH Summit
	13. STATE Utah

RECEIVED
JUN 09 1989DIVISION OF
OIL, GAS & MINING

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON*

REPAIR WELL

CHANGE PLANS

(Other) Operator Name Change

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREATMENT

ALTERING CASING

SHOOTING OR ACIDIZING

ABANDONMENT*

(Other)

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Effective June 1, 1989 Operator Name Change

From: Sun Exploration and Production Company
P.O. Box 26300
Oklahoma City, OK 73126-0300TO: Oryx Energy Company
P.O. Box 26300
Oklahoma City, OK 73126-0300

CONFIDENTIAL

18. I hereby certify that the foregoing is true and correct

SIGNED

Camel Megaw

TITLE

Accountant

DATE

6/5/89

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPL. RE.
(Other instructions on reverse side)

Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to develop or plug back to a different formation.
Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER ☐

2. NAME OF OPERATOR
Oryx Energy Company

3. ADDRESS OF OPERATOR
P.O. Box 26300, Oklahoma City, OK 73126-0300

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also space 17 below.)
At surface

14. PERMIT NO.
43-043-30282

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

5. LEASE DESIGNATION AND SERIAL NO.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Luckey Ditch

8. FARM OR LEASE NAME
Luckey Ditch Water

9. WELL NO.
Handling Facility

10. FIELD AND POOL, OR WILDCAT
Luckey Ditch

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 18 T. 3 N. R. 15 E

12. COUNTY OR PARISH
Utah

13. STATE
Wyoming

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>	WATER SHUT-OFF	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	ABANDONMENT*	<input type="checkbox"/>
(Other)	<input type="checkbox"/>	(Other)	<input type="checkbox"/>

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Installation of Water Disposal Line

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

Permission is requested to lay a permanent water disposal line approximately 18000' from the Luckey Ditch Federal Units Central Battery to the Flash Federal #1. The Units current water production averages 400 BPD. However, w/the introduction of gas lift as a means of artificial lift, the water production could exceed 1000 BPD. The actual work will consist of laying 3 1/2 OD schedule 80 grade X-42 seamless line pipe and using a J165 triplex pump loc. @ Luckey Ditch Central Facility. Proposed line drawings are attached.

**Accepted by the State
of Utah Division of
Oil, Gas and Mining**

Date: 9-1-89

By: For record only

cc: State of Wyoming
State of Utah

18. I hereby certify that the foregoing is true and correct

SIGNED

Carol J. [Signature]

TITLE Accountant

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

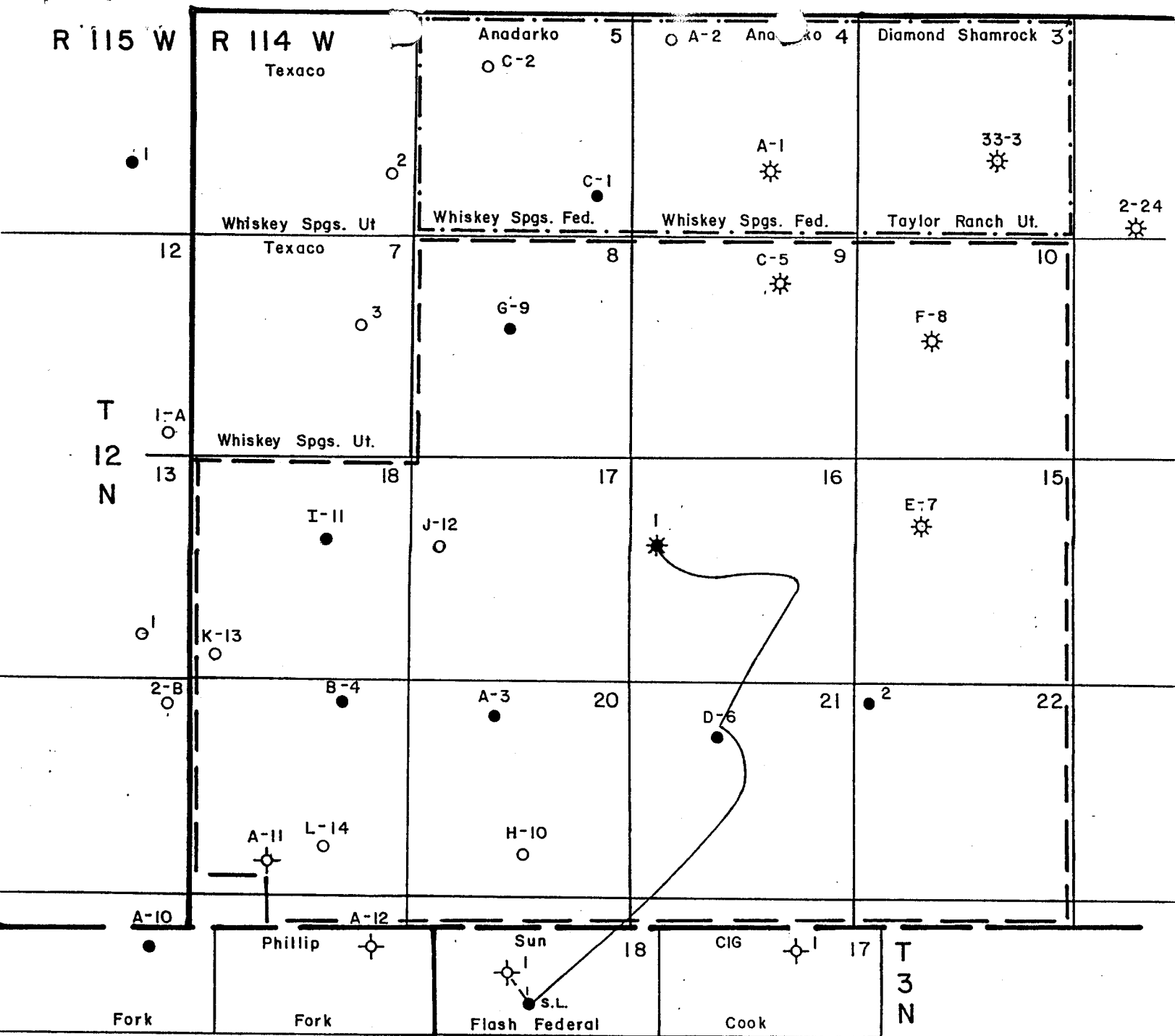
DATE

**Federal Approval of this
Action is Necessary**

*See Instructions on Reverse Side

OIL AND GAS	
DRN	RJF
JRB	GLH
DTS	SLS
2-TAS	
MICROFILM	
3-UIG FILE	DATE 8/23/89

no action taken



WATER DISPOSAL LINE PROPOSED ROUTE

RECEIVED
AUG 30 1989

OIL, GAS & MINING

SUN

Sun Exploration and
Production Company
Rocky Mountain District

LUCKEY DITCH UNIT

TYPE:

DATUM:

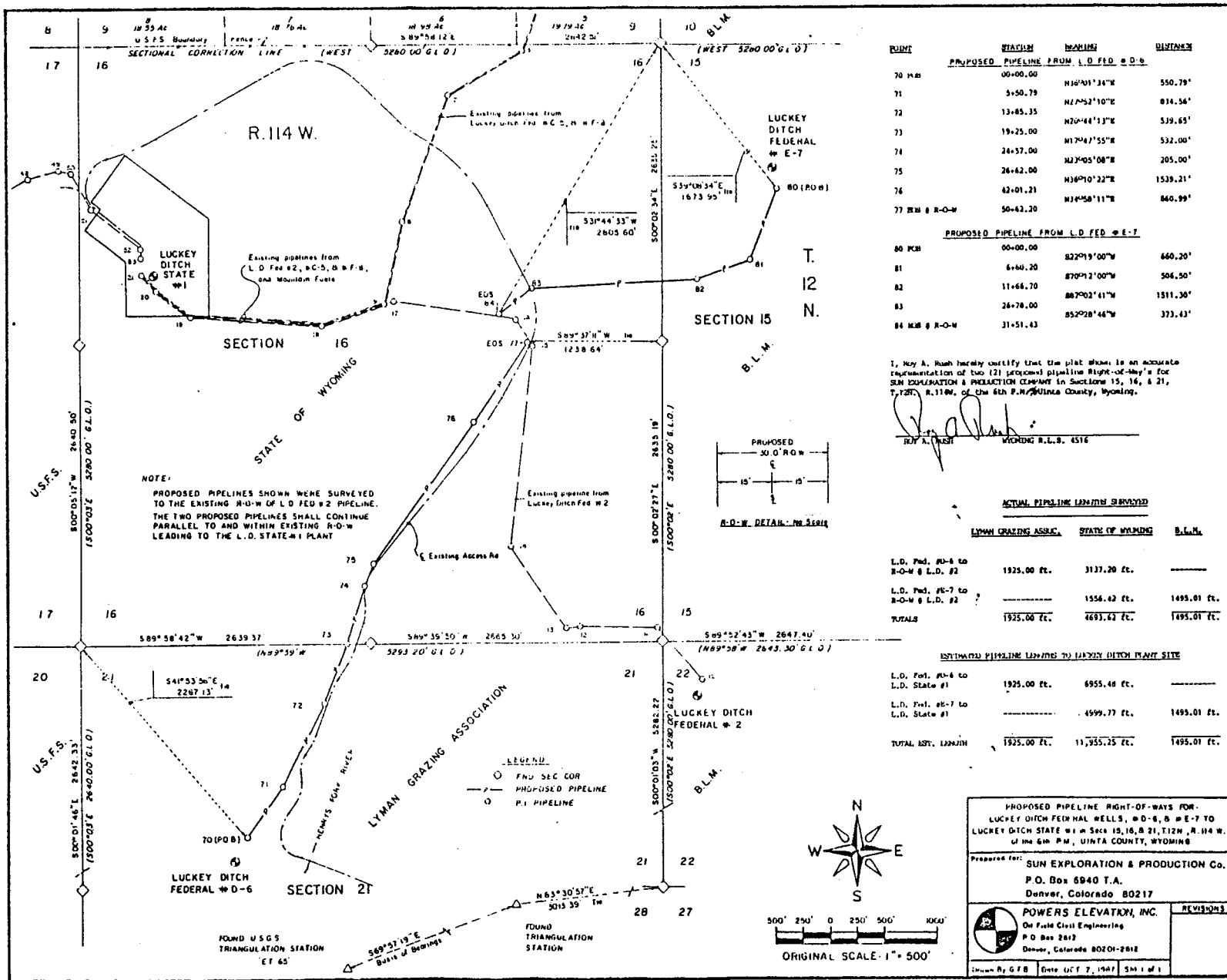
COUNTY: UINTA, STATE: WYOMING

BASE DRAFTED BY & DATE: _____, UPDATE: 6 / 87

GEOLOGY BY: _____, DATE: _____

REVISED BY: _____, DATE: _____

CONTOUR INTERVAL: _____, SCALE: _____



POINT	STATION	BEARING	DISTANCE
PROPOSED PIPELINE FROM L.D. FED # D-6			
70 M.M.	00+00.00	N16°01'34"E	550.79'
71	5+50.79	N2°52'10"E	834.56'
72	13+45.35	N20°46'11"E	539.65'
73	19+25.00	N17°47'55"E	532.00'
74	24+57.00	N12°05'08"E	205.00'
75	26+42.00	N16°10'22"E	1539.21'
76	42+01.21	N14°58'11"E	840.99'
77 M.M. @ R.O.W.	50+42.20		
PROPOSED PIPELINE FROM L.D. FED # E-7			
80 M.M.	00+00.00	S22°19'00"W	660.20'
81	6+40.20	S70°21'00"W	504.50'
82	11+44.70	S87°02'41"W	1511.30'
83	26+78.00	S52°28'44"W	373.43'
84 M.M. @ R.O.W.	31+51.43		

I, Roy A. Nash hereby certify that the plat shown is an accurate representation of two (2) proposed pipeline Right-of-Way's for SUN EXPLORATION & PRODUCTION COMPANY in Sections 15, 16, & 21, T.12N., R.114W., of the 6th P.M., Uinta County, Wyoming.

Roy A. Nash
ROY A. NASH
WYOMING R.L.S. 4516

ACTUAL PIPELINE LENGTHS SURVEYED

LYMAN GRAZING ASSOC.	STATE OF WYOMING	B.L.M.
L.D. Fed. #D-6 to R.O.W. @ L.D. #2	1925.00 ft.	3137.20 ft.
L.D. Fed. #E-7 to R.O.W. @ L.D. #2	1554.42 ft.	1495.01 ft.
TOTALS	1925.00 ft.	4632.21 ft.

ESTIMATED PIPELINE LENGTHS TO LUCKY DITCH PLANT SITE

L.D. Fed. #D-6 to L.D. State #1	1925.00 ft.	6955.48 ft.
L.D. Fed. #E-7 to L.D. State #1	1554.42 ft.	1495.01 ft.
TOTAL EST. LENGTH	1925.00 ft.	11,355.25 ft.

PROPOSED PIPELINE RIGHT-OF-WAYS FOR LUCKY DITCH FEDERAL WELLS, # D-6, # E-7 TO LUCKY DITCH STATE #1 in Secs 15, 16, & 21, T.12N., R.114W., of the 6th P.M., UINTA COUNTY, WYOMING

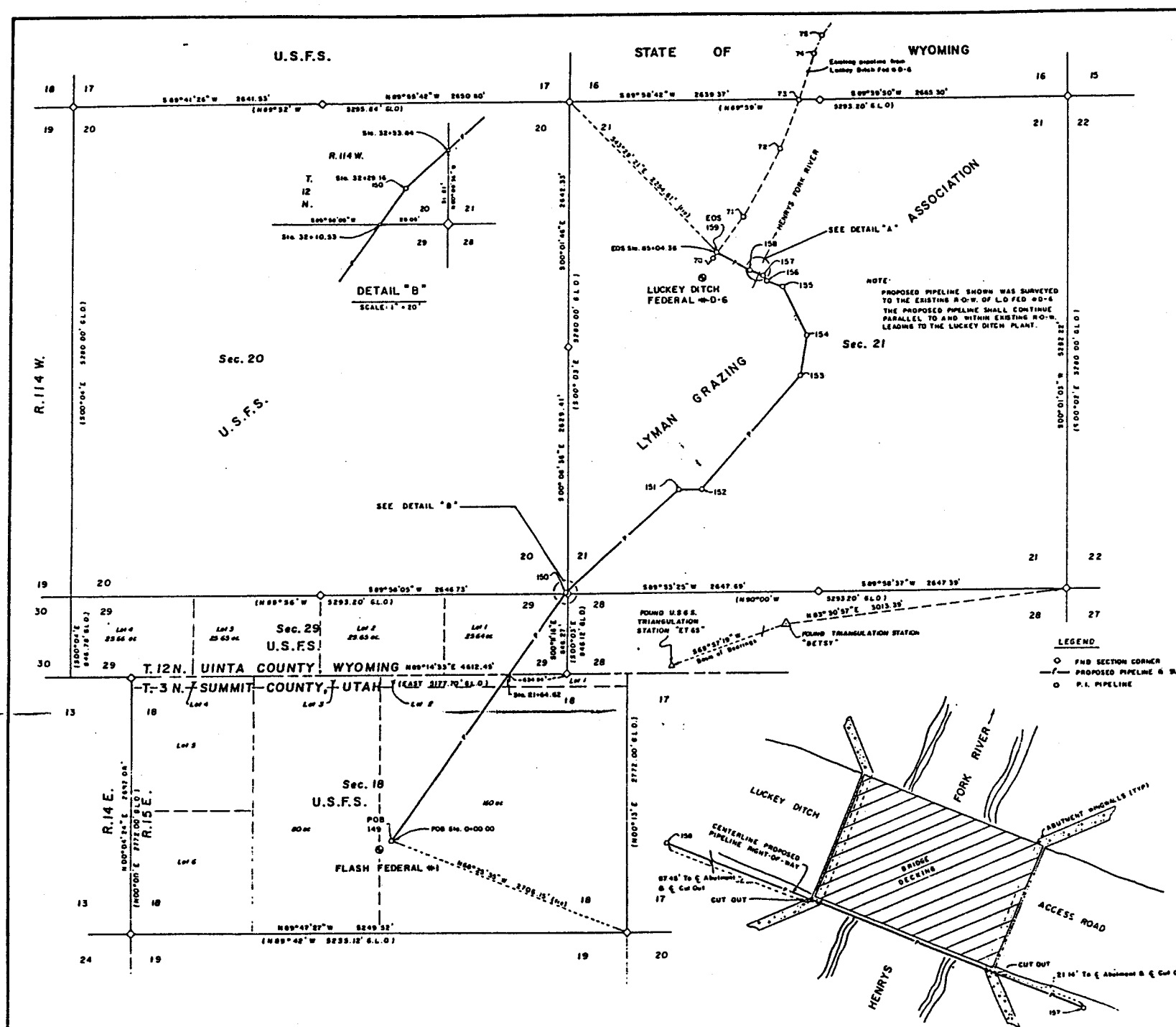
Prepared For:
SUN EXPLORATION & PRODUCTION CO.
P.O. Box 6940 T.A.
Denver, Colorado 80217

By: POWERS ELEVATION, INC.
On File Civil Engineering
P.O. Box 2612
Denver, Colorado 80201-2612

Drawn By: G.F.B. Date: OCT 7, 1987 SH 1 of 1

RECEIVED
AUG 30 1989

DEPT. OF
OIL, GAS & MINING



PROPOSED PIPELINE R.O.W. from FLASH FEDERAL #1 To Lucky Ditch #D-6

POINT	STATION	BEARING	DISTANCE
149	00+00.00	N35°13'00"E	3229.16'
150	32+29.16	N47°44'04"E	1612.51'
151	48+42.67	N09°21'03"E	232.50'
152	50+74.25	N40°53'41"E	1346.00'
153	64+61.05	N09°07'40"E	437.20'
154	70+02.33	N34°21'40"E	503.09'
155	76+03.42	N49°39'40"E	166.34'
156	78+47.76	N32°30'43"E	60.25'
157	79+56.01	N44°37'50"E	148.95'
158	80+04.94	N41°02'10"E	419.40'
159	80+04.26		
0 R.O.W. L.R. P.D. #D-6			

ACTUAL PIPELINE LENGTHS SUBMITTED FROM FLASH FEDERAL #1 TO LUCKY DITCH FEDERAL #D-6 R.O.W.

U.S.F.S.	3253.04 FT.
LYMAN GRAZING ASSOCIATION	3250.62 FT.
TOTAL	1594.72 FT. or 1.6107 miles

ESTIMATED PIPELINE LENGTHS FROM FLASH FEDERAL #1 TO LUCKY DITCH STATE #1 PLANT SITE

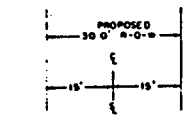
U.S.F.S.	3253.04 FT.
LYMAN GRAZING ASSOCIATION	7111.93 FT.
STATE OF WYOMING	6055.40 FT.
TOTAL	17,319.35 FT. or 3.2944 miles

RECORDED
AUG 30 1989

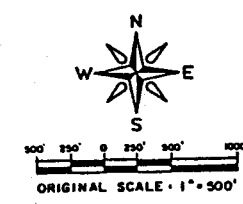
DEPARTMENT OF
GAS & MINING

I, Tom Nelson, hereby certify that the plat shown is an accurate representation of a proposed pipeline right-of-way for the SUN EXPLORATION & PRODUCTION COMPANY in Section 18, T.3 N., R.15 E., of the Salt Lake Meridian, Summit County, Utah, and Sections 20, 21, 29, T.12 N., R.14 E., of the Sixth Principal Meridian, Uinta County, Wyoming.

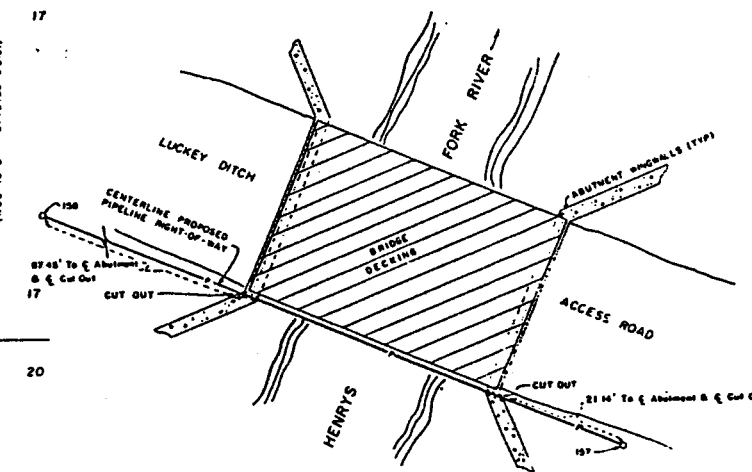
T. Nelson
TOM NELSON
UTAH S.L.S. 2711
WYOMING S.L.S. & PL 307



R.O.W. DETAIL - No. 5001



- LEGEND
- FND SECTION CORNER
 - f- PROPOSED PIPELINE & SURVEY LINE
 - P.L. PIPELINE



DETAIL "A" - BRIDGE
SCALE 1" = 10'

PROPOSED PIPELINE RIGHT-OF-WAY from FLASH FEDERAL #1 to EXISTING RIGHT-OF-WAY from LUCKY DITCH #D-6 R.O.W. in Sec. 18, T.3 N., R.15 E., of the SALT LAKE MERIDIAN, SUMMIT COUNTY, UTAH AND SECTIONS 20, 21, 29, T.12 N., R.14 E. OF THE 6th PRINCIPAL MERIDIAN, UTAH COUNTY, WYOMING

Prepared for: **SUN EXPLORATION & PRODUCTION CO.**
P.O. Box 5040 T.A.
Denver, Colorado 80217

By: **POWERS ELEVATION CO., INC.**
Oil Field Civil Engineering
P.O. Box 2612
Denver, Colorado 80201-2612

Drawn by: G.F.B. Date: APRIL 8, 1990 Sheet 1 of 1

STATE OF UTAH

DIVISION OF OIL, GAS AND MINING

INJECTION WELL - PRESSURE TEST

8:45 AM

TEST DATE: 10/5/93 WELL OWNER/OPERATOR: Oryx Exploration
DISPOSAL WELL: X ENHANCED RECOVERY WELL: OTHER:
API NO: 43-043-30282 WELL NAME/NUMBER: Flash Federal #7
SECTION: 18 TOWNSHIP: 3N RANGE: 158

INITIAL CONDITIONS:

TUBING - rate: NA pressure: 1350 psi

CASING/TUBING ANNULUS - pressure: 0

CONDITIONS DURING TEST:

TUBING pressure: 1350 psi for 15 minutes

CASING/TUBING ANNULUS pressure: 1200 psi

annulus pressure drop during test: 0 psi

CONDITIONS AFTER TEST:

TUBING pressure: 1350 psi

CASING/TUBING ANNULUS pressure: 0 psi

REMARKS:

passed MIT

Jay Baker
OPERATOR REPRESENTATIVE

Don Jarrin
DOGM WITNESS

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

6. Lease Designation and Serial Number
U-27918

7. Indian Allottee or Tribe Name

8. Unit or Communitization Agreement

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.

Use APPLICATION FOR PERMIT — for such proposals

1. Type of Well
☐ Oil Well ☐ Gas Well ☒ Other (specify) **DISPOSAL WELL**

9. Well Name and Number
FLASH FEDERAL 1

2. Name of Operator
ORYX ENERGY COMPANY

10. API Well Number
43-043-30282

3. Address of Operator
P. O. BOX 2880 DALLAS, TX 75221-2880

4. Telephone Number
214 715-3242

11. Field and Pool, or Wildcat
DAKOTA SAND

5. Location of Well

Footage : **900' FSL & 2600' FWL**
 QQ, Sec, T., R., M. : **NE SW SEC. 18-3N-15E**

County : **SUMMIT**
 State : **UTAH**

12. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT (Submit in Duplicate)

- | | |
|---|---|
| <input type="checkbox"/> Abandonment | <input type="checkbox"/> New Construction |
| <input type="checkbox"/> Casing Repair | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans | <input type="checkbox"/> Recompletion |
| <input type="checkbox"/> Conversion to Injection | <input type="checkbox"/> Shoot or Acidize |
| <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Vent or Flare |
| <input type="checkbox"/> Multiple Completion | <input type="checkbox"/> Water Shut-Off |
| <input checked="" type="checkbox"/> Other SALE OF WELL | |

Approximate Date Work Will Start _____

SUBSEQUENT REPORT (Submit Original Form Only)

- | | |
|--|---|
| <input type="checkbox"/> Abandonment * | <input type="checkbox"/> New Construction |
| <input type="checkbox"/> Casing Repair | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change of Plans | <input type="checkbox"/> Shoot or Acidize |
| <input type="checkbox"/> Conversion to Injection | <input type="checkbox"/> Vent or Flare |
| <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Other _____ | |

Date of Work Completion _____

Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION AND LOG form.

* Must be accompanied by a cement verification report.

13. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

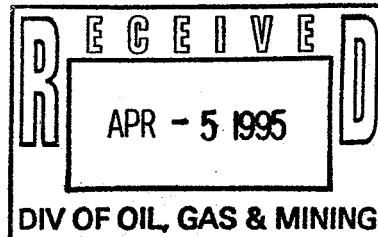
ORYX ENERGY COMPANY RESPECTFULLY SUBMITS THIS NOTIFICATION THAT EFFECTIVE APRIL 1, 1995, THIS WELL WAS SOLD TO:

UNION PACIFIC OIL AND GAS
801 CHERRY ST. MS 3213
P. O. BOX 7
FORT WORTH, TX 76065

BOND FILED WITH: STATE LAND AND FARM LOAN OFFICE - #888909 (5/94)
OIL & GAS CONSERVATION COMMISSION - #843707 (9/94)
BUREAU OF LAND MANAGEMENT - SEE BELOW

AMOUNT OF ASSIGNEE SURETY BONDS: \$150,000

BOND NUMBER: 888994
NAME OF SURETY: GENERAL INSURANCE OF AMERICA
DATE OF BOND: 9/94 (LAST RENEWAL)



14. I hereby certify that the foregoing is true and correct

Name & Signature

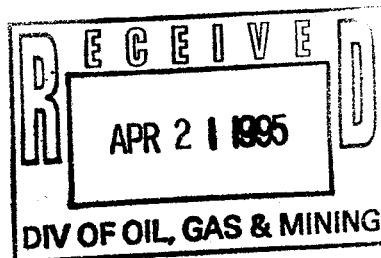
Daniel Burns

Title **PRORATION ANALYST**

Date **4-4-95**

(State Use Only)

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING



TRANSFER OF AUTHORITY TO INJECT - UIC FORM 5

Well name and number: Flash Federal No. 1
Field or Unit name: Dakota Sand API no. 43-043-30282
Well location: QQ NE SW section 18 township 3N range 15E county Summit
Effective Date of Transfer: 4-1-95

CURRENT OPERATOR

Transfer approved by:

Name Tommy J. Drescher Company Oryx Energy Company
Signature *Tommy J. Drescher* Address P. O. Box 2880
Title Manager, Acquisitions, Divestments & Trades Dallas, TX 75221-2880
Date April 3, 1995 Phone (214) 715-4243

Comments:

NEW OPERATOR

Transfer approved by:

Name W.F. Brazelton Company Union Pacific Oil and Gas
Signature *W.F. Brazelton* Address 801 Cherry St., MS 3213
Sr. P. O. Box 7
Title Regulatory Analyst Fort Worth, TX 76065
Date 4/11/95 Phone (817) 877-7952

Comments:

(State use only)

Transfer approved by *A. Hunt* Title *Environ. Manager*

Approval Date 8-14-95 CAUSE# WB-103

FORM 3160-5

UNITED STATES

(June 1990)

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells or to deepen or recut to a different reservoir.
Use "APPLICATION FOR PERMIT TO DRILL -" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well:

OIL (X) GAS () OTHER:

2. Name of Operator

Union Pacific Resources Company

3. Address and Telephone Number

P. O. Box 7 MS 3006 Fort Worth, Texas 76101-0007

Telephone (817) 877-6000 (Main Number)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

NESW Section 18, T. 3 N., R. 15 E.

FORM APPROVED

Budget Bureau No. 1004-0135

Expires March 31, 1993

5. Lease Designation and Serial No.

U-27918

6. If Indian, Allottee or Tribe Name

NA

7. If Unit or CA, Agreement Designation

Lucky Ditch Federal (Wyoming)

8. Well Name and No.

Flash Federal SWD

9. API Well No.

43-043-30282

10. Field and Pool, or Exploratory Area

Dakota

11. County of Parish, State

Summit, Utah

12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

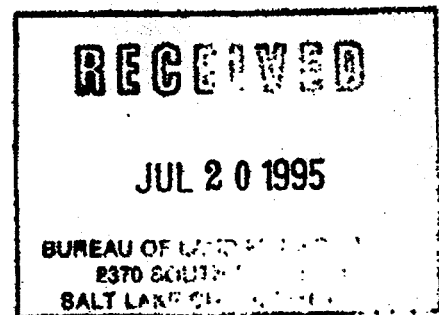
TYPE OF SUBMISSION	TYPE OF ACTION
() Notice of Intent	() Abandonment
() Subsequent Report	() Recompletion
() Final Abandonment Notice	() Plugging Back
	() Casing Repair
	() Altering Casing
	(X) Other: Change of Operatorship
	() Change of Plans
	() New Construction
	() Non-Routine Fracturing
	() Water Shut-Off
	() Conversion to Injection
	() Dispose Water
	(Note: Report results of multiple completions on Well Completion or Recompletion Report and Log Form)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work)*

Please be advised that Union Pacific Resources Company has assumed Operatorship of the above referenced salt water disposal well as indicated on the accompanying Designation of Operator

Operation in connection with the well are covered by Nationwide Bond 888994.

WY 1280



PLEASE CONSIDER ALL SUBMITTALS PERTAINING TO THIS WILL AS "COMPANY CONFIDENTIAL"
If additional information is needed, please contact the undersigned at (817) 877-7952, FAX (817) 877-7942

14. I hereby certify that the foregoing is true and correct.

Name/Signature: W. F. Brazelton

W. F. Brazelton

Title: Senior Regulatory Analyst

Date: 95-07-18

(This space for Federal or State office use)

Approved by

Chris Magoo

Title

ACTING DISTRICT MANAGER

Date

JUL 28 1995

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form 3160-8
(February 1987)

(Submit in triplicate to appropriate
BLM District Office)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

DESIGNATION OF OPERATOR

The undersigned is, on the records of the Bureau of Land Management, holder of lease

STATE OFFICE: Utah State Office - Salt Lake City, Utah

SERIAL NO.: U-27918

and hereby designates

NAME: Union Pacific Resources Company

ADDRESS: PO Box 7, MS 3006

Fort Worth, Texas 76101-0007

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the authorized officer may serve written or oral instructions in securing compliance with the Operating Regulations (43 CFR 3160) with respect to (describe acreage to which this designation is applicable):

Flash Federal No. 1

NESW Section 18, T. 3N., R. 15E.,

Summit County, Utah

API No. 43-043-30282

Bond coverage under 43 CFR 3104 for lease activities conducted by the above named designated operator is under Bond Number 888994

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, stipulations, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the authorized officer of any change in the designated operator.


W.F. Brazelton
(Signature of lessee)

Union Pacific Resources Company

PO Box 7, MS 3006

Fort Worth, Texas 76101-0007

(Address)

95-07-18

(Date)



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Salt Lake District Office
2370 South 2300 West
Salt Lake City, Utah 84119

IN REPLY REFER TO:

3160
U-27918
(UT-025)

JUL 28 1995

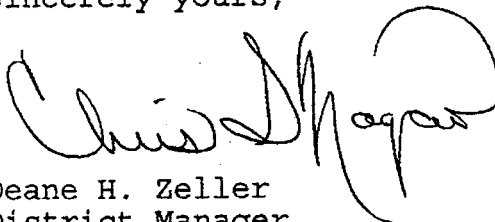
Mr. W. F. Brazelton
Union Pacific Resources Company
P. O. Box 7, MS 3006
Fort Worth, Texas 76101-0007

Dear Mr. Brazelton:

We are in receipt of the notification which properly designates Union Pacific Resources Company as the Operator for the Flash Federal No. 1, salt water disposal well, NENW, Sec. 18, T. 3 N., R. 15 E., Summit County, Utah. All instruments are in order and we approve the Sundry Notice received by our office July 20, 1995 for a Change of Operatorship to your company and note that activities for well operations will be covered under your Nationwide Bond No. (888994). Enclosed is your copy of the approved Sundry Notice.

If you have any questions concerning this matter, please feel free to contact Dan Washington of my staff at (801) 977-4300.

Sincerely yours,

for 
Deane H. Zeller
District Manager

Enclosure Sundry Notices (1)

Post-It™ brand fax transmittal memo 7671		# of pages ▶ 3
To LISHA	From AL MCKEE	
Co. DOGM	Co.	
Dept.	Phone # 539-4045	
Fax # 359-3940	Fax #	

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

Attach all documentation received by the division regarding this change.
 Initial each listed item when completed. Write N/A if item is not applicable.

1-IVC / CTE	
2-LWP 7-PL	
3-DTS 8-SJ	
4-VL 9-FILE	
5-RJF	
6-LWP	

- ☒ Change of Operator (well sold) ☐ Designation of Agent
☐ Designation of Operator ☐ Operator Name Change Only

The operator of the well(s) listed below has changed (EFFECTIVE DATE: 4-1-95)

TO (new operator)	<u>UNION PACIFIC RESOURCES CO</u>	FROM (former operator)	<u>ORYX ENERGY COMPANY</u>
(address)	<u>PO BOX 7 MS 2602</u>	(address)	<u>PO BOX 26300</u>
	<u>FT WORTH TX 76101-0007</u>		<u>OKLAHOMA CITY OK 73126-0300</u>
			<u>DANIELE BURRIS/214-715-3242</u>
	<u>phone (817) 877-6490</u>		<u>phone (405) 752-7100</u>
	<u>account no. N 9465</u>		<u>account no. N 0740</u>

Well(s) (attach additional page if needed):

***WDW**

Name: <u>FLASH FEDERAL 1/DKTA</u>	API: <u>43-043-30282</u>	Entity: <u>10792</u>	Sec <u>18</u> Twp <u>3N</u> Rng <u>15E</u>	Lease Type: <u>U27918</u>
Name: _____	API: _____	Entity: _____	Sec _____ Twp _____ Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____ Twp _____ Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____ Twp _____ Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____ Twp _____ Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____ Twp _____ Rng _____	Lease Type: _____
Name: _____	API: _____	Entity: _____	Sec _____ Twp _____ Rng _____	Lease Type: _____

OPERATOR CHANGE DOCUMENTATION

- Lec 1. (Rule R615-8-10) Sundry or other legal documentation has been received from former operator (Attach to this form). (Rec'd 4-5-95)
- * 2. (Rule R615-8-10) Sundry or other legal documentation has been received from new operator (Attach to this form). (4-21-95 / uic FB) (7-5-95 / uic FB)
- N/A 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is company registered with the state? (yes/no) ____ If yes, show company file number: _____
- Lec 4. (For Indian and Federal Wells ONLY) The BLM has been contacted regarding this change (attach Telephone Documentation Form to this report). Make note of BLM status in comments section of this form. Management review of **Federal and Indian** well operator changes should take place prior to completion of steps 5 through 9 below.
- Lec 5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) for each well listed above. (8-11-95)
- LWP 6. Cardex file has been updated for each well listed above. 8-14-95
- LWP 7. Well file labels have been updated for each well listed above. 8-14-95
- Lec 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to State Lands and the Tax Commission. (8-11-95)
- Lec 9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

ENTITY REVIEW

- Yes 1. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) ____ (If entity assignments were changed, attach copies of Form 6, Entity Action Form).
- N/A 2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.

BOND VERIFICATION (Fee wells only)

- N/A Yes 1. (Rule R615-3-1) The new operator of any fee lease well listed above has furnished a proper bond.
- ____ 2. A copy of this form has been placed in the new and former operators' bond files.
- ____ 3. The former operator has requested a release of liability from their bond (yes/no) _____. Today's date _____ 19____. If yes, division response was made by letter dated _____ 19____.

LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY

- N/A OTS 8/14/95 1. (Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated _____ 19____, of their responsibility to notify any person with an interest in such lease of the change of operator. Documentation of such notification has been requested.
- N/A 2. Copies of documents have been sent to State Lands for changes involving State leases.

FILMING

- ✓ 1. All attachments to this form have been microfilmed. Date: August 21 1995.

FILING

- ____ 1. Copies of all attachments to this form have been filed in each well file.
- ____ 2. The original of this form and the original attachments have been filed in the Operator Change file.

COMMENTS

950421 Rec'd UIC F5.

950811 BLM SL/ Aprv. 7-28-95

(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells or to deepen or reentry to a different reservoir.
 Use "APPLICATION FOR PERMIT TO DRILL --" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well:

OIL ☐ GAS ☐ OTHER: ☒

2. Name of Operator

Union Pacific Resources Company

3. Address and Telephone Number

P. O. Box 7 MS 29-3006-01, Fort Worth, Texas 76101-0007
 Telephone (817) 321-6739

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

NESW, (900' FSL, 2600' FWL) Section 18, T3N-R15E

FORM APPROVED

Budget Bureau No. 1004-0135

Expires March 31, 1993

5. Lease Designation and Serial No.

U-27918

6. If Indian, Allottee or Tribe Name

NA

7. If Unit or CA, Agreement Designation

Luckey Ditch Federal (Wyoming)

8. Well Name and No.

Flash Federal SWD

9. API Well No.

43-043-30282

10. Field and Pool, or Exploratory Area

Dakota

11. County of Parish, State

Summit, Utah

12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☐ Notice of Intent☒ Subsequent Report☐ Final Abandonment
Notice

TYPE OF ACTION

☐ Abandonment☐ Recompletion☐ Plugging Back☐ Casing Repair☐ Altering Casing☒ Other: Change of
Operator☐ Change of Plans☐ New Construction☐ Non-Routine Fracturing☐ Water Shut-Off☐ Conversion to Injection☐ Dispose Water(Note: Report results of multiple completions on Well
Completion or Recompletion Report and Log Form)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work)*

Union Pacific Resources Company advises that, effective November 1, 1998, Merit Energy Company will be the Operator of the subject well. Merit Energy Company's Nationwide Bond Number is WY-3011. Merit Energy Company will be responsible under the terms and conditions of the lease(s) for the operations conducted on the leased lands or portions thereof. Merit Energy Company hereby accepts the operatorship of this well.

By: Arlene Valliquette

Arlene Valliquette, Manager, Regulatory Affairs

12222 Merit Drive, Suite 1500

Dallas, Texas 75251

Telephone No. (972) 701-8377

cc: Utah Division of Oil, Gas & Mining

14 I hereby certify that the foregoing is true and correct.

Name/Signature:

Dorothy Moravek
Dorothy MoravekTitle: Regulatory Analyst

Date:

10/26/98

(This space for Federal or State office use)

Approved by _____

Title _____

Date _____

Conditions of approval (if any):

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instructions On Reverse Side

MERIT ENERGY COMPANY

12222 Merit Drive, Suite 1500
Dallas, Texas 75251
(972) 701-8377
(972) 960-1252 Fax

December 31, 1998

Utah Division of Oil, Gas
& Mining
P. O. Box 145801
Salt Lake City, UT. 84114

RE: Change of Operator Notice
Flash Federal SWD
Summit County, Utah

Dear Sir or Madam:

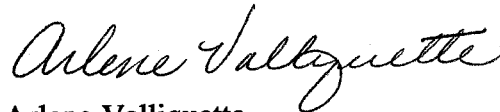
Enclosed you will find, in triplicate, a copy of BLM Form 3160-5 Sundry Notice for Change of Operator covering the above referenced well. Merit Energy Company became the operator of the Flash Federal salt water disposal well effective November 1, 1998.

The well is located on a federal lease, therefore, Merit is submitting the BLM form for change of operator in lieu of the Utah Form 9.

Should you require additional information, please advise this office or contact me at (972) 383-6558.

Sincerely,

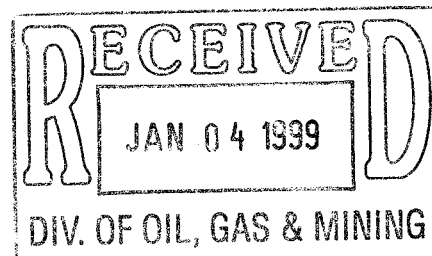
MERIT ENERGY COMPANY



Arlene Valliquette
Manager - Regulatory Affairs

rav

Encls. (3)





United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Salt Lake District Office
2370 South 2300 West
Salt Lake City, Utah 84119

IN REPLY REFER TO:

3160

(UT-023)

MAR 3 1999

Arlene Valliquette
Merit Energy Company
12222 Merit Drive, Suite 1500
Dallas, Texas 75251

Re: Flash Federal #1
NESW Sec 18, T.3 N., R.15 E. SLB&M
UTU-27918
Summit County, Utah

Dear Ms. Valliquette:

Your notification of change of operator for the referenced well cannot be accepted at this time.

Authorization for utilization of this well for disposal was originally granted in 1989. That approval was limited to disposal of produced water from the Bridger Lake Unit. Lease UTU-27918 is associated with that Unit, and disposal would be a benefit authorized by the Mineral Leasing Act.

Monthly Reports of Operations submitted by the operator of Bridger Lake Unit indicate that all of the water produced by that Unit is disposed of into its own well. We are uncertain of the source of the produced fluids being disposed of into the Flash Federal #1, but it does not appear to originate from the Bridger Lake Unit.

Please advise this office of the source of produced water currently being disposed of into this wellbore. If Bridger Lake Unit production is not the sole source, no authorization can be granted under the Mineral Leasing Act, and we will vacate our prior approval.

Please contact Al McKee at (801) 539-4045 to discuss this matter.

Sincerely,

GLENN A. CARPENTER

Glenn A. Carpenter
Field Manager

cc: BTA Oil Producers
NGC Energy Resources
Roger Kesterson, Wasatch-Cache Forest Service
Gil Hunt, Utah Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

Attach all documentation received by the division regarding this change.

Initial each listed item when completed. Write N/A if item is not applicable.

Routing:

1-KDR	6-KAS
2-GLH	7-SJ
3-JRB	8-FILE
4-CDW	
5-KDR	

☒ Change of Operator (well sold)☐ Designation of Agent☐ Designation of Operator☐ Operator Name Change OnlyThe operator of the well(s) listed below has changed, effective: 11-1-98

TO: (new operator) MERIT ENERGY COMPANY
 (address) 12222 MERIT DR. STE 1500
DALLAS, TX 75251
ARLENE VALLIQUETTE
 Phone: (972) 383-6558
 Account no. N4900

FROM: (old operator)
 (address)

UNION PACIFIC RESOURCES CO
P.O. 7 MS 29-3006-01
FORT WORTH, TX 76101-0007
DOROTHY MORAVEK
 Phone: (817) 321-6739
 Account no. N9465

WELL(S) attach additional page if needed:

Name: <u>FLASH FEDERAL 1 (SWD)</u>	API: <u>43-043-30282</u>	Entity: <u>10792</u>	S	<u>18</u>	T	<u>3N</u>	R	<u>15E</u>	Lease: <u>U-27918</u>
Name: _____	API: _____	Entity: _____	S	_____	T	_____	R	_____	Lease: _____
Name: _____	API: _____	Entity: _____	S	_____	T	_____	R	_____	Lease: _____
Name: _____	API: _____	Entity: _____	S	_____	T	_____	R	_____	Lease: _____
Name: _____	API: _____	Entity: _____	S	_____	T	_____	R	_____	Lease: _____
Name: _____	API: _____	Entity: _____	S	_____	T	_____	R	_____	Lease: _____
Name: _____	API: _____	Entity: _____	S	_____	T	_____	R	_____	Lease: _____

OPERATOR CHANGE DOCUMENTATION

- YDR 1. (r649-8-10) Sundry or other legal documentation has been received from the **FORMER** operator (attach to this form). *(Rec'd 1.4.99)*
- YDR 2. (r649-8-10) Sundry or other legal documentation has been received from the **NEW** operator (Attach to this form). *(Rec'd 1.4.99)*
- N/A 3. The **Department of Commerce** has been contacted if the new operator above is not currently operating any wells in Utah. Is the company **registered with the state?** (yes/no) ____ If yes, show company file number: _____
- ____ 4. **FOR INDIAN AND FEDERAL WELLS ONLY.** The BLM has been contacted regarding this change. Make note of BLM status in comments section of this form. BLM approval of **Federal** and **Indian** well operator changes should ordinarily take place prior to the division's approval, and before the completion of **steps 5 through 9** below.
- ____ 5. Changes have been entered in the **Oil and Gas Information System** (3270) for each well listed above.
- ____ 6. **Cardex** file has been updated for each well listed above.
- ____ 7. Well **file labels** have been updated for each well listed above. ** new filing system*
- ____ 8. Changes have been included on the monthly "Operator, Address, and Account Changes" **memo** for distribution to Trust Lands, Sovereign Lands, UGS, Tax Commission, etc.
- YDR 9. A folder has been set up for the **Operator Change file**, and a copy of this page has been placed there for reference during routing and processing of the original documents.

NOT PROCESSED as of 9/17/03

ENTITY REVIEW

1. (r649-8-7) **Entity assignments have been reviewed** for all wells listed above. Were entity changes made? (yes/no) ____ If entity assignments were changed, attach copies of Form 6, Entity Action Form.
- N/A 2. Trust Lands, Sovereign Lands, Tax Commission, etc., have been **notified** through normal procedures of entity changes.

BOND VERIFICATION - (FEE WELLS ONLY)

- N/A 1. (r649-3-1) The **NEW** operator of any fee lease well listed above has furnished a proper bond.
2. A **copy of this form** has been placed in the new and former operator's bond files.
3. The **FORMER** operator has requested a release of liability from their bond (yes/no) ____, as of today's date _____. If yes, division response was made to this request by letter dated _____.

LEASE INTEREST OWNER NOTIFICATION OF RESPONSIBILITY

- N/A 1. Copies of documents have been sent on _____ to _____ at Trust Lands for changes involving State leases, in order to remind that agency of their responsibility to review for proper bonding.
2. (r649-2-10) The former operator of any fee lease wells listed above has been contacted and informed by letter dated _____ 19 ___, of their responsibility to notify all interest owners of this change.

FILMING

1. All attachments to this form have been **microfilmed**. Today's date: _____.

FILING

1. **Copies** of all attachments to this form have been filed in each **well file**.
2. The **original of this form**, and the **original attachments** are now being filed in the Operator Change file.

COMMENTS

STATE OF UTAH
DIVISION OF OIL GAS AND MINING

INJECTION WELL - PRESSURE TEST

Well Name: FLASH FEDERAL # 1 API Number: 43-043-30282Qtr/Qtr: SE/SW Section: 18 Township: 3N Range: 15ECompany Name: UNION PACIFIC RESOURCES COMPANY *Merit Energy*Lease: State _____ Fee X Federal _____ Indian _____Inspector: J THOMPSON Date: 8-12-99

Initial Conditions:

Tubing - Rate: _____ Pressure: 1600 psi

Casing/Tubing Annulus - Pressure: _____ psi

Conditions During Test:

Time (Minutes)	Annulus Pressure	Tubing Pressure
0	<u>0</u>	<u>1600</u>
5	<u>1000</u>	<u>1600</u>
10	<u>1000</u>	<u>1600</u>
15	<u>1000</u>	<u>1600</u>
20	<u>1000</u>	<u>1600</u>
25	<u>1000</u>	<u>1600</u>
30	<u>1000</u>	<u>1600</u>

Results: Pass Fail

Conditions After Test:

Tubing Pressure: 1600 psiCasing/Tubing Annulus Pressure: 0 psi

COMMENTS: _____


Operator Representative



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155

RECEIVED

MAY 03 2001

DIVISION OF
OIL, GAS AND MINING

In Reply Refer To:
3100
UTU-73867
(UT-924)

MAY 2 2001

NOTICE

RME Petroleum Company
P.O. Box 1330
Houston, TX 77251-1330

Oil and Gas Lease
UTU-73867

Name Change Recognized

Acceptable evidence has been received in this office concerning the change of name of Union Pacific Resources Company to RME Petroleum Company on Federal oil and gas lease UTU-73867.

The oil and gas lease file has been noted as to the name change. The lease was obtained from our automated records system. We have not abstracted the lease file to determine if the entity affected by the name change holds an interest in the lease identified nor have we attempted to identify leases where the entity is the operator on the ground maintaining no vested record title or operating rights interests. We are notifying the Minerals Management Service and all applicable Bureau of Land Management offices of the name change by a copy of this notice. If additional documentation for changes of operator are required by our Field Offices, you will be contacted by them.

Due to the name change, the name of the principal on the bond is required to be changed from Union Pacific Resources Company to REM Petroleum Company. You may accomplish this either by consent of surety rider on the original bond or by a rider to the original bond. Otherwise, a replacement bond with the new name should be furnished to the Wyoming State Office.

ROBERT LOPEZ

Robert Lopez
Chief, Branch of
Minerals Adjudication

cc: MMS-Reference Data Branch, MS 3130, Box 5860, Denver, CO 80217
State of Utah, DOGM, Attn: Jim Thompson (Ste. 1210), Box 145801, SLC, UT 84114-5801
Teresa Thompson (UT-922)
Angela Williams/Rhonda Flynn (UT-921)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 5

DESIGNATION OF AGENT OR OPERATOR

The undersigned is, on record, the holder of oil and gas lease

LEASE NAME: Flash Federal 1

LEASE NUMBER: U-27918

and hereby designates

NAME: RME Petroleum Company

ADDRESS: P O Box 1330, Houston, TX 77251-1330

city 1201 Lake Robbins Drive state TX zip 77251-1330
The Woodlands, Texas

as his (check one) agent ☐ / operator ☒ G, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the Division Director or Authorized Agent may serve written or oral instructions in securing compliance with the Oil and Gas Conservation General Rules and Procedural Rules of the Board of Oil, Gas and Mining of the State of Utah with respect to:

(Describe acreage to which this designation is applicable. Identify each oil and gas well by API number and name. Attach additional pages as needed.)

Flash Federal 1, SWD, 18-3N-15E, API# 43-043-30282

RECEIVED

APR 29 2002

DIVISION OF
OIL, GAS AND MINING

It is understood that this designation of agent/operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Oil and Gas Conservation General Rules and Procedural Rules of the Board of Oil, Gas and Mining of the State of Utah. It is also understood that this designation of agent or operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated agent/operator, the lessee will make full and prompt compliance with all rules, lease terms or orders of the Board of Oil, Gas and Mining of the State of Utah or its authorized representative.

The lessee agrees to promptly notify the Division Director or Authorized Agent of any change in this designation.

Effective Date of Designation: December 1, 2000

BY: (Name) Frank A. Davis

(Signature) Frank A. Davis

(Title) Mgr - O&G Comm Affairs

(Phone) 832-636-3130

OF: (Company) RME Petroleum Company
formerly Union Pacific Resources Co.

(Address) P O Box 1330

city Houston

state TX zip 77251-1330

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

UIC FORM 5

TRANSFER OF AUTHORITY TO INJECT

Well Name and Number FLASH FEDERAL 1	API Number 4304330282
Location of Well Footage : 900' FSL & 2600' FWL	Field or Unit Name UNDESIGNATED
County : SUMMIT	Lease Designation and Number U-27918
QQ, Section, Township, Range: SESW 18 3 15	State : UTAH

EFFECTIVE DATE OF TRANSFER: 12/1/2000

CURRENT OPERATOR

Company: Union Pacific Resources Co.
Address: P. O. Box 1330
city Houston state TX zip 77251-1330
Phone: (832) 636-3130
Comments:

Name: Frank A. Davis
Signature: *Frank A. Davis*
Title: Manager - Oil & Gas Commission Affairs
Date: 6/24/2002

NEW OPERATOR

Company: RME Petroleum Company
Address: P.O. Box 1330
city Houston state TX zip 77251-1330
Phone: (832) 636-3130
Comments:

Name: Frank A. Davis
Signature: *Frank A. Davis*
Title: Manager - Oil & Gas Commission Affairs
Date: 6/24/2002

(This space for State use only)

Transfer approved by: *[Signature]*

Title: *Technical Services Manager*

Approval Date: *6/22/02*

Comments:

RECEIVED

JUN 26 2002

DIVISION OF
OIL, GAS AND MINING

**RME**
A Subsidiary of
Anadarko Petroleum Corporation

June 24, 2002

Jim Thompson
Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Salt Lake City, Utah 84114-5801

RE: Union Pacific Resources Company Name Change

Dear Jim,

In support of Union Pacific Resources Company's name change to RME Petroleum Company, enclosed (FINALLY) are UIC Form 5's (Authority to Inject) for active wells currently operated by Union Pacific Resources Co.

<u>Well Name</u>	<u>Well Type</u>	<u>S-T-R</u>	<u>API Well Number</u>
McDonald 1-31-3	Water Disposal	3-2N-7E	43-043-30018
Flash Federal 1	Water Disposal	18-3N-15E	43-043-30282

Thank you so much for your help and patience in getting this name change finalized. It is a pleasure working with you.

Sincerely,

Lesa Perrault
Engineering Tech
Oil & Gas Commission Affairs

Enclosures

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JUN 26 2002

DIVISION OF
OIL, GAS AND MINING

1. GLH <i>glh</i>
2. CDW
3. FILE

Designation of Agent

Merger

The operator of the well(s) listed below has changed, effective:		05-02-2001
FROM: (Old Operator):		TO: (New Operator):
UNION PACIFIC RESOURCES COMPANY		RME PETROLEUM COMPANY
Address: P O BOX 1330		Address: P O BOX 1330
HOUSTON, TX 77251-1330		HOUSTON, TX 77251-1330
Phone: 1-(832)-606-1000		Phone: 1-(832)-636-1000
Account No. N9465		Account No. N1770

Unit:

WELL(S)

[illegible]

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 06/26/2002
 2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 06/26/2002
 3. The new company has been checked through the **Department of Commerce, Division of Corporations Database** on: 06/26/2002
 4. Is the new operator registered in the State of Utah: YES Business Number: 593715-0143
 5. If **NO**, the operator was contacted contacted on: N/A
 6. (R649-9-2) Waste Management Plan received on: IN PLACE
-
6. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change,

or operator change for all wells listed on Federal or Indian leases on: 05/02/2001

7. Federal and Indian Units:

The BLM or BIA has approved the successor of unit operator for wells listed on: N/A

8. Federal and Indian Communization Agreements ("CA"):

The BLM or BIA has approved the operator for all wells listed within a CA on: N/A

9. Underground Injection Control ("UIC")

The Division has approved UIC Form 5, **Transfer of Authority to Inject**,

for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 06/27/2002

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database** on: 06/26/2002

2. Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 06/26/2002

3. Bond information entered in RBDMS on: N/A

4. Fee wells attached to bond in RBDMS on: N/A

STATE WELL(S) BOND VERIFICATION:

1. State well(s) covered by Bond Number: _____

FEDERAL WELL(S) BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: WY 1280

INDIAN WELL(S) BOND VERIFICATION:

1. Indian well(s) covered by Bond Number: N/A

FEE WELL(S) BOND VERIFICATION:

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number 2447222

2. The **FORMER** operator has requested a release of liability from their bond on: N/A

The Division sent response by letter on: N/A

LEASE INTEREST OWNER NOTIFICATION:

3. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: N/A

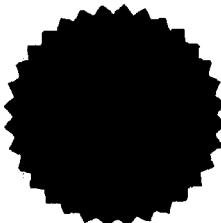
COMMENTS:

Delaware

PAGE 1

*The First State***\$100.00
EXPEDITE**

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THAT THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF CONVERSION OF A DELAWARE CORPORATION UNDER THE NAME OF "RME PETROLEUM COMPANY" TO A DELAWARE LIMITED PARTNERSHIP, CHANGING ITS NAME FROM "RME PETROLEUM COMPANY" TO "ANADARKO E&P COMPANY LP", FILED IN THIS OFFICE ON THE THIRTEENTH DAY OF AUGUST, A.D. 2002, AT 4 O'CLOCK P.M.

*Harriet Smith Windsor*

Harriet Smith Windsor, Secretary of State

0616120 8100V

AUTHENTICATION: 1936176

020515231

DATE: 08-14-02

STATE OF DELAWARE
 SECRETARY OF STATE
 DIVISION OF CORPORATIONS
 FILED 04:00 PM 08/13/2002
 020512742 - 0616120

RECEIVED

SEP 12 2002

Utah Div. Of Corp. & Comm. Code

CONVERSION

**CERTIFICATE OF CONVERSION
 FROM A CORPORATION TO A LIMITED PARTNERSHIP
 PURSUANT TO SECTION 266 OF THE
 DELAWARE GENERAL CORPORATION LAW
 AND SECTION 17-217 OF THE
 DELAWARE REVISED UNIFORM LIMITED PARTNERSHIP ACT**

1. The converting entity was incorporated under the laws of the state of Delaware by filing its original certificate of incorporation with the Secretary of State of Delaware on September 29, 1964.
2. The converting entity was originally incorporated under the name of Champlin Petroleum Company and its current name is RME Petroleum Company.
3. Upon conversion from a corporation to a limited partnership the name of the entity will change to Anadarko E&P Company LP.
4. The conversion has been approved in accordance with the provisions of Section 266 of the Delaware General Corporation Law and Section 17-217 of the Delaware Revised Uniform Limited Partnership Act.

IN WITNESS WHEREOF, RME Petroleum Company and Anadarko General Resources LLC have caused this Certificate of Conversion to be signed by their authorized officers on this 13th day of August, 2002.

RME PETROLEUM COMPANY

By: J. Stephen Martin
 J. Stephen Martin
 Vice President

ANADARKO GENERAL RESOURCES LLC

By: James R. Larson
 James R. Larson
 Vice President

State of Utah
 Department of Commerce
 Division of Corporations and Commercial Code

I hereby certified that the foregoing has been filed
 And approved on this 13 day of SEP 2002
 In this office of this Division and hereby issued
 this Certificate thereof.

Examiner

Date



Kathy Berg
 Kathy Berg
 Division Director

** TOTAL PAGE.03 **

09-12-02P02:17 RCVD

**CERTIFICATE OF LIMITED PARTNERSHIP
OF
ANADARKO E&P COMPANY LP**

The undersigned as general partner of Anadarko E&P Company LP (the "Partnership"), in connection with the conversion of a Delaware corporation to a limited partnership pursuant to the Delaware Revised Uniform Limited Partnership Act, hereby certifies and states as follows:

1. The name of the Partnership is Anadarko E&P Company LP.
2. The address of the registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of the registered agent of the Partnership at such address for service of process is The Corporation Trust Company.
3. The location of the principal office in the United States where records of the partnership are to be kept or made available is 1201 Lake Robbins Drive, The Woodlands, Texas 77380.
4. The name and mailing address of the General Partner is:

Anadarko General Resources LLC
1201 Lake Robbins Drive
The Woodlands, TX 77380

IN WITNESS WHEREOF, the undersigned has executed this Certificate to be effective as of the 13th day of August, 2002.

ANADARKO GENERAL RESOURCES LLC

By: James R. Larson
James R. Larson
Vice President

2002 SEP -4 AM 9:26

STATE OF DELAWARE
DIVISION OF CORPORATIONS



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Wyoming State Office

P.O. Box 1828

Cheyenne, Wyoming 82003-1828

In Reply Refer To:

3106.8

(921Jensen)

PHONE NO: (307) 775-6252

FAX NO: (307) 775-6203

SEP 17 2002

DECISION

Anadarko E&P Company LP
1201 Lake Robbins DR
The Woodlands, TX 77380

Name Change and Conversion Recognized

Acceptable evidence has been received in this office concerning the name change of **RME Petroleum Company**, to **Anadarko E&P Company LP**, with subsequent conversion of **Anadarko E&P Company LP** from a **Delaware Corporation** to a **Delaware Limited Partnership**.

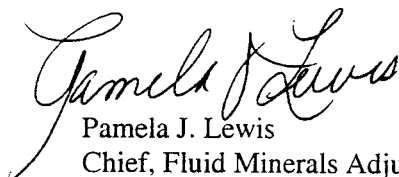
For our purposes, the name change and conversion is recognized effective August 13, 2002.

The oil and gas lease files identified on the enclosed exhibit have been noted as to the name change. The exhibit was compiled from your list of leases, and a list of leases obtained from our Legacy Rehost System (LR2000). We have not abstracted the lease files to determine if the entities affected by this name change hold an interest in the leases identified nor have we attempted to identify leases where the entities are the operator on the ground maintaining no vested record title or operating rights interests. We are notifying the Minerals Management Service and all applicable Bureau of Land Management offices of the change by a copy of this notice. If additional documentation for changes of operator is required by our Field Offices, they will contact you.

If you identify additional leases in which the merging entities maintain an interest, please contact this office and we will appropriately document those files with a copy of this Notice.

Due to the name change, the name of the principal/obligor on the bond is required to be changed from **RME Petroleum Company** to **Anadarko E&P Company LP**. You may accomplish this either by consent of surety rider on the original bond or by a rider to the original bond. Otherwise, a replacement bond with the new name should be furnished to the appropriate Bureau of Land Management office.

If you have any questions concerning this correspondence, please call Ronelle L. Jensen at (307) 775-6252.


Pamela J. Lewis
Chief, Fluid Minerals Adjudication

I Attachment

1 - Exhibits (26 pgs.)


cc:

Name Change Log
Public Room Name Change Log
(921Jerome)
(921Jensen)
State Offices
Casper, RMG Sharon Taylor

Minerals Field Offices

Linda Reed, Buffalo FO
Shelley Reed, Newcastle FO
Ellen Burris, Casper FO
Diane Schurman, Rawlins FO
Debra Olsen, Rawlins FO
Debbie Larsen, Lander FO
Jean Cattelan, Kemmerer FO
Sue Robertson, Pinedale FO
Cara Blank, Cody FO
Carol Sheaff, Worland FO
Kelly Lyman, Worland FO

STATE OF UTAH
DEPARTMENT OF COMMERCE
REGISTRATION
ANADARKO E&P COMPANY LP



EFFECTIVE
10/21/1964

EXPIRATION
***RENEWAL**

REFERENCE NUMBER(S), CLASSIFICATION(S) & DETAIL(S)

Limited Partnership - Foreign
593715-0181

C T CORPORATION SYSTEM
ANADARKO E&P COMPANY LP
50 W BROADWAY 8TH FLOOR
SALT LAKE CITY UT 84101-2006

STATE OF UTAH
DEPARTMENT OF COMMERCE
DIVISION OF CORPORATIONS & COMMERCIAL CODE
REGISTRATION



EFFECTIVE DATE: 10/21/1964
EXPIRATION DATE: *RENEWAL
ISSUED TO: ANADARKO E&P COMPANY LP

REFERENCE NUMBER(S), CLASSIFICATION(S) & DETAIL(S)
593715-0181 Limited Partnership - Foreign
***RENEWAL**

You will need to renew your registration each anniversary date of the effective date.
Exceptions: DBAs and Business Trusts renew every three (3) years from the effective date.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155

In Reply Refer To:
3106
UTU-73867
(UT-924)

SEP 24 2002

Memorandum

To: Salt Lake Field Office

From: Chief, Branch of Minerals Adjudication

Subject: Merger and Name Change Approval

Attached is an approved copy of the Merger recognized by the Wyoming State Office. We have updated our records to reflect:

The merger from RME Petroleum Company, into Anadarko E&P Company LP is effective August 13, 2002.

Rita Stelmach

Rita Stelmach
Acting, Chief Branch of
Minerals Adjudication

Enclosure

1. Wyoming Decision (7 pp)

cc: MMS, Reference Data Branch, MS3130, PO Box 5860, Denver CO 80217
State of Utah, DOGM, Attn: Jim Thompson (Ste. 1210), Box 145801, SLC UT 84114
Teresa Thompson (UT-922)
Joe Incardine (UT-921)

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SEP 25 2002

DIVISION OF
OIL, GAS AND MINING



Federal Express 8330 0936 6481

October 7, 2002

Jim Thompson
Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Salt Lake City, Utah 84114-5801

RE: Corporation Name Change
Anadarko E&P Company LP

Dear Mr. Thompson,

Please be advised RME Petroleum Company has changed its name to Anadarko E&P Company LP.

Following is the only active well currently shown, according to your records, to be operated by RME Petroleum Company.

<u>Well Name</u>	<u>Well Type</u>	<u>S-T-R</u>	<u>API Well Number</u>
Flash Federal 1	Water Disposal	18-3N-15E	43-043-30282

In support of this name change, please find the following:

- UIC Form 5 (Transfer of Authority to Inject)
- Copy of the Revised Surety Rider to Bond #2447222
- Utah Secretary of State certificate authorizing Anadarko E&P Company LP to conduct business in Utah
- Delaware Secretary of State certificate showing conversion and name change from RME Petroleum Company to Anadarko E&P Company LP

It is respectfully requested the records of the Utah Division of Oil, Gas and Mining be updated with this new information. If you have any questions please contact me at 832-636-3561, or by email at lesa_perrault@anadarko.com.

Respectfully,

ANADARKO E&P COMPANY LP

A handwritten signature in black ink, appearing to read "Lesa Perrault".

Lesa Perrault
Engineering Technician

Enclosures

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OCT 08 2002

**DIVISION OF
OIL, GAS AND MINING**

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

UIC FORM 5

TRANSFER OF AUTHORITY TO INJECT

Well Name and Number FLASH FEDERAL 1	API Number 4304330282
Location of Well Footage : 900' FSL & 2600' FWL County : SUMMIT	Field or Unit Name UNDESIGNATED
QQ, Section, Township, Range: SESW 18 3 N 15 E State : UTAH	Lease Designation and Number U-27918

EFFECTIVE DATE OF TRANSFER: 8/13/2002

CURRENT OPERATOR

Company: RME Petroleum Company	Name: Frank A. Davis
Address: P.O. Box 1330	Signature: <i>Frank A. Davis</i>
city Houston state TX zip 77251-1330	Title: Manager - Oil & Gas Commission Affairs
Phone: (832) 636-3130	Date: 10/7/2002
Comments:	

NEW OPERATOR

Company: Anadarko E&P Company LP	Name: Frank A. Davis
Address: P.O. Box 1330	Signature: <i>Frank A. Davis</i>
city Houston state TX zip 77251-1330	Title: Manager - Oil & Gas Commission Affairs
Phone: (832) 636-3130	Date: 10/7/2002
Comments:	

(This space for State use only)

Transfer approved by: *[Signature]*
Title: *Public Services Manager*

Approval Date: 10/9/02

Comments:

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OCT 08 2002

DIVISION OF
OIL, GAS AND MINING

1. GLH
2. CDW
3. FILE

Designation of Agent

Merger

The operator of the well(s) listed below has changed, effective:		08-13-2002
FROM: (Old Operator):		TO: (New Operator):
RME PETROLEUM COMPANY		ANADARKO E&P COMPANY LP
Address: P O BOX 1330		Address: P O BOX 1330
HOUSTON, TX 77251-1330		HOUSTON, TX 77251-1330
Phone: 1-(832)-636-3130		Phone: 1-(832)-636-3130
Account No. N1770		Account No. N2245

Unit:

WELL(S)

[illegible]

Enter date after each listed item is completed

1. (R649-2-10) Sundry or legal documentation was received from the **FORMER** operator on: 10/08/2002
2. (R649-2-10) Sundry or legal documentation was received from the **NEW** operator on: 10/08/2002
3. The new company has been checked through the **Department of Commerce, Division of Corporations Database** on: 10/08/2002
4. Is the new operator registered in the State of Utah: YES Business Number: 593715-0181
5. If **NO**, the operator was contacted on: N/A

6. (R649-9-2)Waste Management Plan has been received on: IN PLACE

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: 09/24/2002

8. **Federal and Indian Units:**

The BLM or BIA has approved the successor of unit operator for wells listed on: N/A

9. **Federal and Indian Communization Agreements ("CA"):**

The BLM or BIA has approved the operator for all wells listed within a CA on: N/A

10. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 10/09/2002

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database** on: 10/08/2002

2. Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 10/08/2002

3. Bond information entered in RBDMS on: N/A

4. Fee wells attached to bond in RBDMS on: N/A

STATE WELL(S) BOND VERIFICATION:

1. State well(s) covered by Bond Number: N/A

FEDERAL WELL(S) BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: WY 1280

INDIAN WELL(S) BOND VERIFICATION:

1. Indian well(s) covered by Bond Number: N/A

FEE WELL(S) BOND VERIFICATION:

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number N/A

2. The **FORMER** operator has requested a release of liability from their bond on: N/A

The Division sent response by letter on: N/A

LEASE INTEREST OWNER NOTIFICATION:

3. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: N/A

COMMENTS:

P.O. BOX 1138
Mountain View WY, 82939
Phone: 1-307-782-6483 6139
Fax: 1-307-782-3734

Merit Energy
Company

Fax

To: Lisha Cordova From: Pete Dellinger
Fax: 1-801-359-3940 Date: 9-12-02
Phone: _____ Pages: 2 Including Cover
Ref: _____ CC: _____

☒ Urgent ☐ for Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

~~Comments~~

RECEIVED

SEP 12 2002

DIVISION OF
OIL, GAS AND MINING

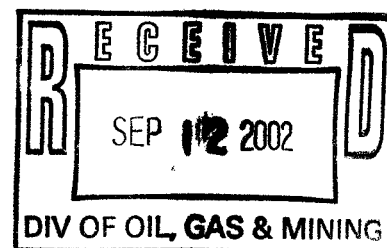
Sept. 12, 2002

Flash Fed. #1

Change out tubing gauge, that was reading 4000psi.

Put in new gauge. It is now reading 1750 psi.

Doing integrity test on well tomorrow.



Division of Oil, Gas and Mining
PHONE CONVERSATION DOCUMENTATION FORM

Route original/copy to:

☒ Well File Flush Fwd #1

☐ Suspense

☐ Other

(Loc.) Sec 18 Twp 3N Rng 15E

(Return Date) _____

(API No.) 43-043-30282

(To-Initials) _____

1. Date of Phone Call: 9-12-02 ^{9-10-02 msg. (Violation)} Time: 10:30

2. DOGM Employee (name) J. Cordova (☒ Initiated Call)

Talked to:

Name Pete Dellinger (☐ Initiated Call) - Phone No. (307) 780-7520 (cell)
of (Company/Organization) Merit Energy Co.

3. Topic of Conversation: Insp. on 8-29-02, tubing pressure gauge
4100 PSI. Problem with gauge? Or other problem?

4. Highlights of Conversation: _____

Probably a gauge malfunction, usually reads 1800-1900 psi.
He will check gauge & repair if needed.
He will also fax DOGM information as follow-up.

* 9-12-02 Fax Changed tubing gauge & put in a new
one, now reads 1750 PSI - doing integrity test tomorrow
9-13-02. Op. will fax test results when done.

* 9-23-02 MIT on 9-13-02 failed, pulled tubing hole found 200'
above packer & 600' above packer, repaired holes, replaced collars,
hydrotested, pressure tested tubing to 6000 PSI, will be doing another
MIT on backside 1000 PSI either today or tomorrow. Unable to get
a hot oil truck w/ recorder for MIT. Will fax follow-up information.
* 9-23-02 MIT/2nd Passed, rec'd w/o info. 9-24-02, OK per admin. (GH)

P.O. BOX 1138
Mountain View WY, 82930
Phone: 1-307-782-6483
Fax: 1-307-782-3734

Merit Energy
Company

Fax

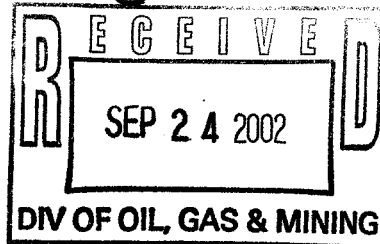
To LISA Cordova From MERIT ENERGY
Fax 601-359-3940 Date 9-24-02
Phone _____ Page 4 + Cover
Ref _____ CC _____

X Urgent ☒ for Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle
-Comments: _____

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SEP 24 2002
DIVISION OF
OIL, GAS AND MINING



1. Coolest Pres
held for 30 min



**BAKER
HUGHES**

Baker Oil Tools

JOB LOG

No. _____

Page _____ of _____

Operating Company:

MERIT ENERGY

Well Name or Number:

#1 FLOW

Represented by:

Mr. Pete Dellinger

SST#

BOT Rep:

Randy Miller

Lease: FEDERAL

Field:

State:

Region/District

Rocky Mountain, Wyo.

DETAIL THE JOB

THIS FORM USED TO REPORT WHAT ACT

PLACE

Date & Time

Operations & Remarks

09-19-2002 7:45am A.O.L. - TEST DEADMAN - RIG UP 508 RIG - N.D. TREE - N.U. B.O.P.
2:00pm RELEASE ARROW SET ASIX 7K PACKER SET @ 15666' 1st Equalizer
3:00pm Start P.O.D.H. w/ 2 3/8" 6.5" FUEL N-80 TAG
Released For Day

09-21-2002 8:00am A.O.L. - P.O.D.H. - Lay Down Tools - Work on RIG TOOLS
11:00am MAKE UP #452X2 3/8" Model "R-3" 6.5" GORE PATENTABLE THE w/ Ball Plug on Bottom
1- Joint ABOVE, 2-313" PCLN - ABOVE 1- Joint 2 3/8" Tag - Hydro Test to 6000' Good
Make Up 2- more Jts - Pick Up Hydro-Test Tools - Test to 6,000' PCT
T.I.H. TESTING
3:00pm RELEASE FOR DAY

09-22-2002 1:45pm A.O.L. - T.I.H. Hydro Testing - HAVE 499jts in Hole - Rig Down
Hydro-Tester
3:00pm SET "R-3" PACKER @ 15,605' w/ 22,000#
3:30pm S.T.W.F.N. RELEASED

09-23-2002 7:00am A.O.L. - Casing on Slight Vacuum - Rig Up Hot Oil Tank to Heat + Pump
Packer Fluid down Casing to Test. Pump 500psi Casing Full - PCT to
1000' Hold for 30min. Good. Bleed off PST - Pick Up on Tag - Open Unloader
8:45am Pump Down Rig - Circulate the Fluid. 220 gals
3:00pm Put on Wood around Cement Test Csg to 1000' - DONUT LEAK
Close PIP, RANS - TEST TO 1000' Good - Bleed off PST
N.D. BOP - N.U. TREE (REMOVING WOOD AROUND)
5:30pm TEST Csg AGAIN 30 min. 1000' Good 1 by 1
6:00pm RELEASED FOR DONE

Pete Dellinger

CUSTOMER EVALUATION

This Section is completed by the Customer Representative upon completion of the job. We are striving to ensure our customers' expectations are met.

Personnel

Knowledge of Products
Organization
Communication
Safety
Appearance

Excellent

Good

Fair

Poor

Performance
Safety
Reliability

Excellent

Good

Fair

Poor

Documentation
(if applicable) Job Report

Excellent

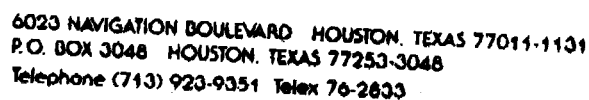
Good

Fair

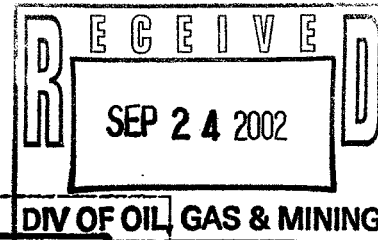
Poor

[illegible]

(907) 242-6253



MERIT ENG



COMPANY Merit Energy CO

WELL Flash Fed #2

FIELD Lucky Ditch

COMPANY REP. Pete D.

RIG REP. S.O.S.



FOUR STAR

★★★★

Testing and Rental Tool, Inc.

P.O. Box 1367 Panguitch, Utah 84050
Ph. (801) 722-2210 646-4125 646-4786

TUBING TESTING

Date 9/18/02 Time Out 8/AM Time In 9/AM Date 9/21-02 Time Out 6/AM Time In 6/PM

Date 9/19/02 Time Out minch Time In 9 Date 9/22-02 Time Out 7/AM Time In 5/PM

TOTAL HOURS 27 COST PER HOUR \$40.00 / 9.23.02 7/AM 12 PM

1680 00

Joints Tubing Tested

SIZE 2 7/8

NUMBER

510

COST EACH

4.00

2040 00

Joints Tubing Tested

Minimum chrg for 9-18/9-19/9-20/95.00 2850 00

Water Saver Rubbers

SIZE 2 7/8

2 sets

per set

35.00

70 00

Pressure Rubbers

SIZE 2 7/8

10

Each

10.00

100 00

Tool Charge

yes

1

160.00

160 00

Broach Pulled

yes

2.347

60.00

60 00

Overstressed Cable

Substance

5

150.00

750 00

GALLON

COST PER GALLON

Test Water

Fuel

125

1.65

206 25

Mileage Total

435

Round trip

1.50

652 50

Truck No. 1

Operator Scott Landry

TOTAL

7968 75

Company Rep. Pete D.

Rig. Rep.

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING
OIL AND GAS PROGRAM

PHONE CONVERSATION DOCUMENTATION FORM

✓ Copy? ☐

Conversation Pertains to:

☒ WELL Flash Federal 1-10

☐ OTHER

Section 18 Township 03N Range 15E

API Number 43-043-30282

Topic of Conversation: Sale of injection well from Union Pacific Resources to Merit Energy; BLM not approved to Merit;

Date of Phone Call: 8/4/2003

Time: 11:45 am

DOGM Employee (name): Earlene Russell

✓ Initiated Call? ☒

Spoke with:

Name: Rick Robitaille

✓ Initiated Call? ☐

Of (company/organization): Anadarko

Phone: (307) 232-9505

Highlights of Conversation:

Sale of injection well from Union Pacific Resources Corporation to Merit Energy; BLM not approved to Merit; Transfer of Authority to Inject from UPRC to RME Petroleum Company to Anadarko E&P Company, LP

Tamara Smith (DOGM) had a telephone conversation with Marty Talbott (Anadarko) on 7/9/2003 re faxes sent 7/3/2003 to Jennifer Berlin (Anadarko); Carla Ghazizadeh (Anadarko); and Richard Robitaille (Anadarko) requesting change of operator or Designation of Operator-form 5 and Transfer of Authority to Inject UIC-5 and/or BLM approval. Forms faxed to Marty Talbott 7/21. No response as of 8/4/2003. 8/4/2003 left message for Marty to return call; spoke with Rick Robitaille. He said forwarded 7/3/2003 message to Houston. Please send e-mail and copies from file to him again and he will see if they can resolve. Some Anadarko records lost in hurricane earlier. They may not have their records.

I spoke with Arlene Valliquette (Merit Energy) 5/28/2003; she confirmed purchase from UPRC. Merit has been operating and reporting on Flash Federal 1-10 since 1998 when well was purchased.

I sent hard copies of appropriate documents to Rick Robitaille 8/4/2003.

Action required: Show appropriate operator of record with operator currently operating well by

1. Transfer of Authority to Inject (UIC 5) and
2. Designation of Operator (Form 5) or
3. Item 1 and BLM approval [work with Arlene Valliquette (Merit Energy) 972 701-8377]

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING
OIL AND GAS PROGRAM

PHONE CONVERSATION DOCUMENTATION FORM

✓ Copy? ☐

Conversation Pertains to:

☒ **WELL** Flash Federal 1-10

☐ **OTHER**

Section 18 Township 03N Range 15E

API Number 43-043-30282

Topic of Conversation: Progress of Operator Change to show actual operator

Date of Phone Call: 9/17/2003

Time: 7:40 am

DOGM Employee (name): Earlene Russell

✓ Initiated Call? ☒

Spoke with:

Name: Carla Ghazizadeh

✓ Initiated Call? ☐

Of (company/organization): Anadarko

Phone: (832) 636-3315

Highlights of Conversation:

She received information from Rick Robitaille; had spoke with their landman, etc. Research got set to the side but she will resurrect it. Discussed situation of BLM not approving, water sources for injection. We only need Sundry from them to approve operator change. Advised her that Arlene Valliquette of Merit would do whatever to assist, including trying for BLM approval again. I have necessary information from Merit and only need Anadarko's approval due to previous operator changes.

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>SWD</u>		5. LEASE DESIGNATION AND SERIAL NUMBER: <u>U-27918</u>
2. NAME OF OPERATOR: <u>Anadarko E&P LP Company</u>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: <u>na</u>
3. ADDRESS OF OPERATOR: <u>P. O. Box 1330</u> CITY <u>Houston</u> STATE <u>TX</u> ZIP <u>77251</u>		7. UNIT or CA AGREEMENT NAME: <u>Lucky Ditch Federal (Wyoming)</u>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <u>900' FSL & 2600' FWL</u>		8. WELL NAME and NUMBER: <u>Flash Federal 1-10 SWD</u>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <u>NESW 18 3N 15E</u>		9. API NUMBER: <u>4304330282</u>
COUNTY: <u>Summit</u>		10. FIELD AND POOL, OR WILDCAT: <u>Dakota</u>
STATE: <u>UTAH</u>		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Sundry filed to report that effective November 1, 1998, Anadarko transferred operatorship to Merit Energy Company.

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OCT 16 2003
DIV. OF OIL, GAS & MINING

NAME (PLEASE PRINT) <u>Carla Ghazizadeh</u>	TITLE <u>Env. & Reg. Analyst</u>
SIGNATURE <u>Carla Ghazizadeh</u>	DATE <u>10/14/03</u>

(This space for State use only)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

UIC FORM 5

TRANSFER OF AUTHORITY TO INJECT

Well Name and Number Flash Federal #1	API Number 043-30282
Location of Well Footage : 900' FSL & 2600' FWL County : Summit QQ, Section, Township, Range: SESW 18 3N 15E State : UTAH	Field or Unit Name Lease Designation and Number U-27918

EFFECTIVE DATE OF TRANSFER: 11/1/98

CURRENT OPERATOR

N2245

Company: Anadarko E&P Company LP
Address: P O Box 1330
city Houston state TX zip 77380-1330
Phone:
Comments:

Name: Joy L. Rector
Signature: J L Rector
Title: EIR Supervisor
Date: 4/14/04

NEW OPERATOR

N4900

Company: Merit Energy Company
Address: 13727 Noel Road, Suite 500
city Dallas state TX zip 75240
Phone: (972) 701-8377
Comments:

Name: Arlene Valliquette
Signature: Arlene Valliquette
Title: Land/Regulatory Mgr - North Division
Date: 2/26/2004

(This space for State use only)

Transfer approved by: [Signature]
Title: Tech Services Manager

Approval Date: 4-15-04

Comments: Cause # WD-103

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APR 15 2004

DIV. OF OIL, GAS & MINING

NO FEDERAL APPROVAL

3. FILE

Merger

11/1/1998

Phone: 1-(972) 701-8377

Unit:

[illegible]

5. If **NO**, the operator was contacted contacted on:

6. (R649-9-2)Waste Management Plan has been received on:

IN PLACE

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM NOT GIVEN BIA

8. **Federal and Indian Units:**

The BLM or BIA has approved the successor of unit operator for wells listed on: n/a

9. **Federal and Indian Communization Agreements ("CA"):**

The BLM or BIA has approved the operator for all wells listed within a CA on: n/a

10. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: 4/15/2004

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database** on: 4/19/2004

2. Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 4/19/2004

3. Bond information entered in RBDMS on: N/A

4. Fee wells attached to bond in RBDMS on: N/A

5. Injection Projects to new operator in RBDMS on: 4/19/2004

6. Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

STATE WELL(S) BOND VERIFICATION:

1. State well(s) covered by Bond Number: n/a

FEDERAL WELL(S) BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: WY3011

INDIAN WELL(S) BOND VERIFICATION:

1. Indian well(s) covered by Bond Number: n/a

FEE WELL(S) BOND VERIFICATION:

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number n/a

2. The **FORMER** operator has requested a release of liability from their bond on: N/A
The Division sent response by letter on: N/A

LEASE INTEREST OWNER NOTIFICATION:

3. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: N/A

COMMENTS:

BLM DID NOT approve this transfer [Union Pacific Resources Corporation became RME Petroleum Company who merged with Anadarko E&P Co, LP]; DOGM made operator change to show current party working the well

STATE OF UTAH
DIVISION OF OIL GAS AND MINING

INJECTION WELL - PRESSURE TEST

Well Name: <u>Flash Fed #1 (WOW)</u>	API Number: <u>43-043-30282</u>
Qtr/Qtr: <u>SESW</u>	Section: <u>18</u>
Township: <u>3N</u>	Range: <u>18E</u> <u>15E</u>
Company Name: <u>Merit Energy Company</u>	
Lease: State <u> </u>	Fee <u> </u>
Federal <input checked="" type="checkbox"/>	Indian <u> </u>
Inspector: <u>Lisha Cordova</u>	Date: <u>July 26, 2004</u>
<u>H.R. Trucking Inc. - Derrick Hintz (46 BBLs prior to arrival)</u>	

Initial Conditions:

Tubing - Rate: Pressure: 250 psiCasing/Tubing Annulus - Pressure 0 psi

Conditions During Test:

Time (Minutes)	Annulus Pressure	Tubing Pressure
0	<u>1000</u>	<u> </u>
5	<u>1000</u>	<u> </u>
10	<u>900</u>	<u> </u>
15 12 min.	<u>800</u>	<u> </u>
20 15 min.	<u>750</u>	<u> </u>
25	<u> </u>	<u> </u>
30	<u> </u>	<u> </u>

Results: Pass/Fail

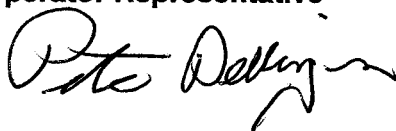
Conditions After Test:

Tubing Pressure: 250 psiCasing/Tubing Annulus Pressure: 250 psi

COMMENTS:

Csg. 0 Annulus full prior to test dropped 75# in 7 min., dropped 250# in 15 min. Failed test. Operator suspects collar leak @ 2400', will repair asap. Repaired collar leak @ 10,000 prior to test.

Operator Representative



STATE OF UTAH
DIVISION OF OIL GAS AND MINING

INJECTION WELL - PRESSURE TEST

Well Name: <u>Flash Fed. #1 (WDW)</u>	API Number: <u>43-043-30282</u>
Qtr/Qtr: <u>SESW</u>	Section: <u>18</u>
Township: <u>3N</u>	Range: <u>15E</u>
Company Name: <u>Merit Energy Co.</u>	
Lease: State <u> </u>	Fee <u> </u>
Federal <input checked="" type="checkbox"/>	Indian <u> </u>
Inspector: <u>Lisha Candone</u>	Date: <u>Aug. 27, 2004</u>
<u>Key Rig # 370 / Don Baucum (Merit)</u>	

Initial Conditions:

Tubing - Rate: Pressure: psiCasing/Tubing Annulus - Pressure: 0 psi

Conditions During Test:

Time (Minutes)	Annulus Pressure	Tubing Pressure
0	<u>1050</u>	<u> </u>
5	<u>"</u>	<u> </u>
10	<u>"</u>	<u> </u>
15	<u>"</u>	<u> </u>
20	<u> </u>	<u> </u>
25	<u> </u>	<u> </u>
30	<u> </u>	<u> </u>

Results: Pass/Fail

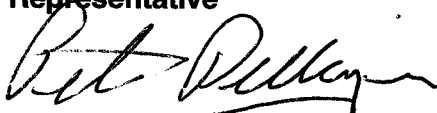
Conditions After Test:

Tubing Pressure: psiCasing/Tubing Annulus Pressure: psi

COMMENTS:

Post workover, tubing leak @ 6800' repaired, packer reset @ 15,622'.
1050 psi held 15 min., passed MIT.

Operator Representative





United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155



IN REPLY REFER TO
3180
UT-922

October 19, 2004

Whiting Oil & Gas Corporation
Attn: Sandy Galpin
Mile High Center
1700 Broadway, Suite 2300
Denver, Colorado 80290-2300

Re: Bridger Lake Unit
Summit County, Utah

Gentlemen:

On October 14, 2004, we received an indenture dated October 1, 2004, whereby Merit Energy Company resigned as Unit Operator and Whiting Oil & Gas Corporation was designated as Successor Unit Operator for the Bridger Lake Unit, Summit County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective October 19, 2004. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Bridger Lake Unit Agreement.

Your Utah statewide oil and gas bond No. UTB000148 will be used to cover all federal operations within the Bridger Lake Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Terry Catlin

Terry Catlin
Acting Chief, Branch of Fluid Minerals

Enclosure

bcc: Field Manager – Salt Lake (w/enclosure)
SITLA
Division of Oil, Gas & Mining
Dockets
File – Bridger Lake Unit (w/enclosure)
Agr. Sec. Chron
Fluid Chron
Central Files

UT922:TAThompson:tt:10/19/04

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OCT 20 2004

DIV. OF OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

UIC FORM 5

TRANSFER OF AUTHORITY TO INJECT

Well Name and Number Flash Federal #1	API Number 043-30282
Location of Well Footage : 900' FSL & 2600' FWL County : Summit QQ, Section, Township, Range: SESW 18 3N 15E State : UTAH	Field or Unit Name Lease Designation and Number U-27918

EFFECTIVE DATE OF TRANSFER: Oct 1, 2004

CURRENT OPERATOR

Company: Merit Energy Company	Name: Arlene Valliquette
Address: 13727 Noel Road, Suite 500	Signature: <u>Arlene Valliquette</u>
city Dallas state TX zip 75240	Title: Land/Regulatory Manager North Division
Phone: (972) 628-1558	Date: <u>OCTOBER 20, 2004</u>
Comments:	

NEW OPERATOR

Company: Whiting Oil and Gas Corporation	Name: James T. Brown
Address: 1700 Broadway, Suite 2300	Signature: <u>James T. Brown</u>
city Denver state CO zip 80290	Title: <u>Vice President of Operations</u>
Phone: <u>303/837-1661</u>	Date: <u>OCTOBER 20, 2004</u>
Comments:	

(This space for State use only)

Transfer approved by: [Signature]
Title: Field Services Manager

Approval Date: 10-26-04

Comments: Case # WD-103

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OCT 25 2004

DIV. OF OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL ☐ GAS WELL ☐ OTHER See Attached

2. NAME OF OPERATOR:
Merit Energy Company

N4900

3. ADDRESS OF OPERATOR:
13727 Noel Road, Ste 500 CITY Dallas STATE TX ZIP 75240

PHONE NUMBER:
(972) 628-1558

4. LOCATION OF WELL

FOOTAGES AT SURFACE: See Attached List

COUNTY: Summit

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:

STATE:

UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____ <input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input checked="" type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input type="checkbox"/> PRODUCTION (START/RESUME) <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	<input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUT-OFF <input type="checkbox"/> OTHER: _____

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Merit Energy Company, effective July 1, 2004, has transferred its interest in the attached list of properties to:

Whiting Oil and Gas Corporation
1700 Broadway, Suite 2300
Denver, CO. 80290

Transfer of operations is effective October 1, 2004.

WHITING OIL AND GAS CORPORATION

N2680

By: James T. Brown
James T. Brown, Vice President of Operations

Date: October 20, 2004

NAME (PLEASE PRINT) Arlene Valliquette

TITLE Land/Regulatory Manager - North Division

SIGNATURE

Arlene Valliquette

DATE

OCTOBER 20, 2004

(This space for State use only)

APPROVED 10/28/04
Earlene Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

(See Instructions on Reverse Side)

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OCT 25 2004

DIV. OF OIL, GAS & MINING

CHANGE OF OPERATOR
from Merit Energy Company to Whiting Oil and Gas Corporation
Bridger Lake Unit, Summit County, Utah
Attachement to UOGM Form 9

Well Type	Lease Serial No.	Field Name	Well Name/Number	API Number	Surface Location
Inj Well	U-013145	Bridger Lake	Fork A #3	43-043-20010	NWNW (627' FNL & 520' FWL) Sec 25-T3N-R14E
Oil Well	U-013147	Bridger Lake	Fork A #4	43-043-20143	NWNW (990' FNL & 1000' FWL) Sec 26-T3N-R14E
Oil Well	U-013147	Bridger Lake	Fork A #5	43-043-20186	SWSE (1120' FSL & 1530' FEL) Sec 23-T3N-R14E
Oil Well	U-013147	Bridger Lake	Fork A #6	43-043-20196	SWNW (1470' FNL & 1045' FWL) Sec 23-T3N-R14E
Oil Well	U-013146	Bridger Lake	Fork A #7	43-043-20303	SWSE (1120' FSL & 1724' FEL) Sec 24-T3N-R14E
Oil Well	U-013147	Bridger Lake	Fork A #13	43-043-30146	NWNE (50' FNL & 1443' FEL) Sec 35-T3N-R14E
Inj Well	U-27918	Bridger Lake	Flash Federal #1	43-043-30282	SESW (900' FSL & 2600' FWL) Sec 18-T3N-R15E
Inj Well	U-013147	Bridger Lake	Fork A #10	43-043-30001	NWSE (1686' FSL & 1623' FEL) Sec 14-T3N-R14E

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OCT 28 2004

DIV. OF OIL, GAS & MINING

OPERATOR CHANGE WORKSHEET

ROUTING

1. GLH

2. CDW

3. FILE

X Change of Operator (Well Sold)

Designation of Agent/Operator

Operator Name Change

Merger

The operator of the well(s) listed below has changed, effective:

7/1/2004

FROM: (Old Operator):

N4900-Merit Energy Company
13727 Noel Rd, Suite 500
Dallas, TX 75249

Phone: 1-(972) 628-1558

TO: (New Operator):

N2680-Whiting Oil & Gas Corporation
1700 Broadway, Suite 2300
Denver, CO 80290

Phone: 1-(303) 837-1661

CA No.

Unit:

Bridger Lake

WELL(S)

NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
A-5	23	030N	140E	4304320186	6285	Federal	GW	S
A-6	23	030N	140E	4304320196	6285	Federal	OW	S
A-7	24	030N	140E	4304320303	6285	Federal	OW	P
A-3	25	030N	140E	4304320010	6285	Federal	GI	I
A-4	26	030N	140E	4304320143	6285	Federal	OW	S
A-13	35	030N	140E	4304330146	6285	Federal	OW	P
FLASH FEDERAL 1	18	030N	150E	4304330282	10792	Federal	WD	A
D-10	14	030N	140E	4304330001	6285	Federal	WD	A

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 10/25/20042. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 10/25/20043. The new company was checked on the **Department of Commerce, Division of Corporations Database** on: 9/28/20044. Is the new operator registered in the State of Utah: YES Business Number: 5426359-01435. If **NO**, the operator was contacted on:6a. (R649-9-2) Waste Management Plan has been received on: IN PLACE6b. Inspections of LA PA state/fee well sites complete on: ordered
10/28/04

FORM 3

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal intervals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>SW DISPOSAL</u>		5. LEASE DESIGNATION AND SERIAL NUMBER:
2. NAME OF OPERATOR <u>Whiting Oil + Gas</u>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
3. ADDRESS OF OPERATOR <u>Mile high center 1700 Broadway Suite 2300 Denver</u> STATE <u>CO</u> ZIP <u>80290-2300</u> PHONE NUMBER <u>303-752-6139</u>		7. UNIT or CO AGREEMENT NAME:
4. LOCATION OF WELL FOOTAGES AT SURFACE:		8. WELL NAME AND NUMBER: <u>Flash Federal #1</u>
CITY/TOWNSHIP, RANGE, MERIDIAN: <u>NE SW, SEC 18-T3N-R1E</u>		9. API NUMBER: <u>43-043-30282</u>
COUNTY: <u>Summit</u>		10. FIELD AND POOL OR WILDCAT:
STATE: <u>UTAH</u>		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	
TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> NOTICE OF INTENT (Submit to Classifier) Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMBINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:	<input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input type="checkbox"/> PRODUCTION (START/RESUME) <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> RETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input checked="" type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUT-OFF <input type="checkbox"/> OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Replaced Gauge on Casing, New Gauge Read ~~20~~ ZERO.
September 2005

NAME (PLEASE PRINT) Pete Dellinger TITLE Production Foreman
SIGNATURE Pete Dellinger DATE 12-16-05

(This space for State use only)

(5/2000)

(See Instructions on Reverse Side)

RECEIVED

DEC 16 2005

DIV. OF OIL, GAS & MINING

P.O. BOX 1138
Mountain View WY, 82939
Phone: 1-307-782-6463
Fax: 1-307-782-3734

Whiting Oil & Gas
Company

Fax

To: Lisha Cordova	From: Whiting Oil & Gas
Fax: 801-359-3940	Date:
Phone:	Pages: 1 + Cover
Re: Sundry Notice	CC:
X Urgent <input type="checkbox"/> for Review <input type="checkbox"/> Please Comment <input type="checkbox"/> Please Reply <input type="checkbox"/> Please Recycle	

*Comments:

Lisha,

If you need anything else Please call

Thanks.

RECEIVED
DEC 16 2005
DIV. OF OIL, GAS & MINING



JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

August 12, 2009

Pete Dellinger
Whiting Oil & Gas Corporation
P. O. Box 1138
Mountain View, WY 82939

Subject: Pressure Test for Mechanical Integrity, Flash Federal 1 Well, Section 18, Township 3 North, Range 15 East, API No. 43-043-30282, Summit County, Utah

Dear Mr. Dellinger:

The Underground Injection Control Program, which the Division of Oil, Gas and Mining (DOGM) administers in Utah, requires that all Class II injection wells demonstrate mechanical integrity. Rule R649-5-5.3 of the Oil and Gas Conservation General Rules requires that the casing-tubing annulus above the packer be pressure tested at a pressure equal to the maximum authorized injection pressure or 1,000 psi, whichever is lesser, provided that no test pressure is less than 300 psi. This test shall be performed at least every five-year period beginning October 1982. Please make arrangements and ready the Flash Federal 1 well for testing during the week of August 24-27, 2009, as outlined below:

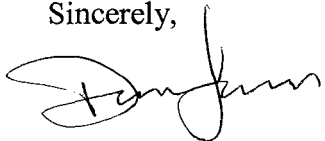
1. Operator must furnish connections, and accurate pressure gauges, hot oil truck (or other means of pressuring annulus), along with personnel to assist in opening valves, etc.
2. The casing-tubing annulus shall be filled prior to the test date to expedite testing, and the well will be required to hold pressure for a minimum of 15 minutes.
3. If mechanical difficulties or workover operations make it impossible for the well to be tested at this time the test may be rescheduled.



4. Company personnel should meet a DOGM representative(s) at the field office or other location as negotiated.
5. All bradenhead valves with the exception of the tubing on the injection well must be shut-in 24 hours prior to testing.

Please contact Lisha Cordova at (801) 538-5296 to arrange a meeting time and place or to negotiate a different date, if the date(s) specified is unacceptable.

Sincerely,

A handwritten signature in black ink, appearing to read 'Dan Jarvis', with a stylized flourish at the end.

Dan Jarvis
Operations Manager

DJJ/LC/js

cc: Lisha Cordova, Petroleum Specialist
Well File

STATE OF UTAH
DIVISION OF OIL GAS AND MINING

INJECTION WELL - PRESSURE TEST

Well Name: <u>Flash Federal 1</u>	API Number: <u>43-043-30282</u>
Qtr/Qtr: <u>SESW</u>	Section: <u>18</u> Township: <u>3N</u> Range: <u>15E</u>
Company Name: <u>Whiting Oil & Gas Corp.</u>	
Lease: State _____ Fee _____	Federal <input checked="" type="checkbox"/> <u>(Feet. Surf)</u> Indian _____
Inspector: <u>Lisha Cordova & M. Linbold</u>	Date: _____
<u>AB Services, Inc. (307) 273-5033</u>	

Initial Conditions:

Tubing - Rate: 0 Pressure: 0/150 psi
 Casing/Tubing Annulus - Pressure: 0 psi

Conditions During Test:

Time (Minutes)	Annulus Pressure	Tubing Pressure
0	1000 1050	0
5	1050	0
10	1050	0
15	1050	0
20		
25		
30		

Results: Pass/Fail

Conditions After Test:

Tubing Pressure: 0 psi
 Casing/Tubing Annulus Pressure: 0 psi

COMMENTS: Replaced tubing gauge prior to test.

[Signature]
 Operator Representative

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-27918
1. TYPE OF WELL Water Disposal Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: WHITING OIL & GAS CORPORATION		7. UNIT or CA AGREEMENT NAME:
3. ADDRESS OF OPERATOR: 1700 Broadway, Suite 2300, Denver, CO, 80290 2300		8. WELL NAME and NUMBER: FLASH FED 1
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0900 FSL 2600 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESW Section: 18 Township: 03.0N Range: 15.0E Meridian: S		9. API NUMBER: 43043302820000
PHONE NUMBER: 303 390-4095 Ext		9. FIELD and POOL or WILDCAT: UNDESIGNATED
COUNTY: SUMMIT		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 4/1/2012 <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARY ABANDON <input checked="" type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> OTHER	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>	
<input type="checkbox"/> DRILLING REPORT Report Date:		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
MIRU. Packer won't release. RIH w/1 11/16" gun, no results. Chem cut bttm jt @ 15615'. Circ to 15505', clean returns down to 15596'. POOH w/tools, fish & packer assy. no chem cut sleeve. RIH, tag fill @ 15637', circ large chips & grit out of hole. Pump up @ 1 bpm, press to 1400#, no inj rate. TIH, set down on lower packer assy. Circ down csg, up tbg, PUH, work down again got large amts of grit & iron sulfide scale chips, circ clean. Pump 600 gals 15% HCl, 87 bbls FW & clay mix. TIH, set down on fish w/tools, caught locator & seal assy, lost chem cutter down rathole. TIH w/packer assy, set @ 14700', test to 1500#, no leaks. Pump 650 gals 15% acid, 10 bbls clean produced water, set 1hr. Press dropped to 1300# while injtg. SI inj pump. Press up csg 20 mins, no bleed off. RDMO. Well injtg 03/30/2012. Plase change well status to active SWD.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY August 29, 2012		
NAME (PLEASE PRINT) Pauleen Tobin	PHONE NUMBER 303 390-4267	TITLE Engineer Tech
SIGNATURE N/A	DATE 6/20/2012	

<div><div><div></div><div>WHITING</div></div><div>Lease Review All</div><div>Well Name: FLASH FEDERAL 1 SWD</div></div>															
API Number 4304330282			WPC ID 1UT018810			Well Permit Number			Field Name Bridger Lake			County Summit		State UT	
Well Configuration Type Deviated/Directional			Orig KB Elv (ft) 8,766.00			Ground Elevation (ft) 8,735.00			Casing Flange Elevation (ft)		Tubing Head Elevation (ft)		Total Depth (ftKB) 15,983.0		
Original Spud Date 8/13/1987		Completion Date 4/22/1988		Asset Group Central Rockies Asset Group			Responsible Engineer Mike Stahl			N/S Dist (ft) 900.0		N/S Ref FSL	E/W Dist (ft) 2,600.0		E/W Ref FWL
Lot		Quarter 1 NE	Quarter 2 SW	Quarter 3	Quarter 4	Section 8	Section Suffix	Section Type		Township 3	Township N/S Dir N	Range 15		Range E/W Dir E	Meridian
Deviated/Directional - Sidetrack 2, 5/8/2012 8:34:21 AM						Wellbore Sections									
MD (ftKB)	TV D (ftKB)	In cl (°)	Vertical schematic (actual)	Logs	Wellbore Name		Start Date		Size (in)		Act Top (ftKB)		Act Btm (ftKB)		
					Original Hole		8/13/1987		24		31.0		60.0		
					Original Hole		8/31/1987		12 1/4		60.0		5,007.0		
					Original Hole		9/13/1987		8 3/4		5,007.0		15,600.0		
					Sidetrack 1		1/2/1988		8 1/2		12,575.0		15,523.0		
Sidetrack 2		2/16/1988		8 1/2		14,340.0		15,983.0							
Conductor Pipe, 60.0ftKB															
OD (in)		Wt (lb/ft)		Grade		Top (ftKB)		Btm (ftKB)		Len (ft)		Item Des			
16		84.00		J-55		31.0		59.5		28.50		Casing Joints			
16						59.5		60.0		0.50		Guide Shoe			
Surface Casing, 5,007.0ftKB															
OD (in)		Wt (lb/ft)		Grade		Top (ftKB)		Btm (ftKB)		Len (ft)		Item Des			
9 5/8		40.00		K-55		31.0		2,021.2		1,990.20		Casing Joints			
9 5/8						2,021.2		2,022.7		1.50		DV Tool			
9 5/8		40.00		K-55		2,022.7		4,923.0		2,900.30		Casing Joints			
9 5/8						4,923.0		4,923.8		0.80		Float Collar			
9 5/8		40.00		K-55		4,923.8		5,005.5		81.70		Casing Joints			
9 5/8						5,005.5		5,007.0		1.50		Shoe			
Production Casing, 15,983.0ftKB															
OD (in)		Wt (lb/ft)		Grade		Top (ftKB)		Btm (ftKB)		Len (ft)		Item Des			
5 1/2		20.00		N-80		31.0		15,893.7		15,862.70		Casing Joints			
5 1/2						15,893.7		15,894.5		0.80		Float Collar			
5 1/2		20.00		N-80		15,894.5		15,981.5		87.00		Casing Joints			
5 1/2						15,981.5		15,983.0		1.50		Shoe			
Cement Stages															
Des		Pump Start Date		Drill Out Date		Top (ftKB)		Btm (ftKB)		Top Meas Meth					
Conductor Cement		8/14/1987				31.0		60.0							
Surface Cement		9/12/1987				31.0		2,021.0		Returns to Surface					
Surface Cement		9/12/1987				2,021.0		5,007.0		DV Tool					
#1 KO Plug		12/15/1987		12/18/1987		12,510.0		12,955.0							
Cement Plug		12/15/1987				14,630.0		14,833.0							
Cement Plug		12/15/1987				14,900.0		15,117.0							
Cement Plug		2/12/1988		2/16/1988		14,300.0		14,600.0							
Cement Plug		2/13/1988		2/16/1988		14,300.0		14,600.0							
Cement Plug		2/12/1988				15,000.0		15,100.0							
#2 KO Plug		2/12/1988		2/16/1988		14,034.0		14,367.0							
Prod Cmt		3/26/1988				14,670.0		15,983.0		Cement Bond Log					
PB Cement		3/26/1988				15,927.0		15,983.0							
Perforations															
Type of Hole		Date		Top (ftKB)		Btm (ftKB)		Zone							
Perforated		4/13/1988		15,792.0		15,822.0		Dakota, Sidetrack 2							
Stim/Treat Stages															
Stage Type		Start Date		Top (ftKB)		Btm (ftKB)		Stim/Treat Fluid				Vol Clean Pump (bbl)			
Acidizatio n		4/7/1989		15,792.0		15,822.0		7.5% HCl, Acid				71.42			
Acidizatio n		10/31/1989		15,792.0		15,822.0		3000gals 7.5% HCL, 1000gals HAI-85 w/6000gals , 3% KCl Water							
Acidizatio n		2/7/1990		15,792.0		15,822.0		7.5% HCl, Acid				71.42			
Tubing - Production set at 14,685.9ftKB on 3/27/2012 06:00															
Set Depth (ftKB)		Comment										Run Date			
14,685.9												3/27/2012			
Item Des		OD (in)		ID (in)		Len (ft)		Top (ftKB)		Btm (ftKB)					
Tubing Hanger		3.668		2.357		2.00		3.0		5.0					
Pkr Travel/tbg compression		2 7/8				9.00		5.0		14.0					
2 7/8 N-L 80 eue PUP Jt		2 7/8				1.84		14.0		15.8					
2 7/8 eue B x 2 7/8 PH6 Hyd P XO		2 7/8				0.70		15.8		16.5					
Tubing		2 7/8		2.441		10,154.41		16.5		10,171.0					
2 7/8 PH6 Hyd B x 2 7/8 eue P XO		2 7/8				0.80		10,171.0		10,171.8					
Tubing		2 7/8		2.441		4,470.97		10,171.8		14,642.7					
XN Nipple 2.312 Otis Profile		2 7/8				1.32		14,642.7		14,644.0					
Tubing		2 7/8		2.441		33.72		14,644.0		14,677.8					
2 7/8 eue B x 2 3/8 eue X Over		2 7/8				0.38		14,677.8		14,678.1					
10K Carb AS1-X Pkr		4 1/2				3.56		14,678.1		14,681.7					
CM to bttm		2 3/8				3.85		14,681.7		14,685.6					
Re-Entry Guide		3 1/16		2.000		0.37		14,685.6		14,685.9					
<des> on <dtmrun>															
Rod Description												Run Date			

Lease Review All											
Well Name: FLASH FEDERAL 1 SWD											
API Number 4304330282		WPC ID 1UT018810		Well Permit Number		Field Name Bridger Lake		County Summit		State UT	
Well Configuration Type Deviated/Directional		Orig KB Elv (ft) 8,766.00		Ground Elevation (ft) 8,735.00		Casing Flange Elevation (ft)		Tubing Head Elevation (ft)		Total Depth (ftKB) 15,983.0	
Original Spud Date 8/13/1987		Completion Date 4/22/1988		Asset Group Central Rockies Asset Group		Responsible Engineer Mike Stahl		N/S Dist (ft) 900.0		N/S Ref FSL	
E/W Dist (ft) 2,600.0		E/W Ref FWL		Lot		Quarter 1 NE		Quarter 2 SW		Quarter 3 SE	
Quarter 4 NW		Section 8		Section Suffix		Section Type		Township 3 N		Township N/S Dir N	
Range 15 E		Range E/W Dir E		Meridian		Range		Range		Range	
Deviated/Directional - Sidetrack 2, 5/8/2012 8:34:25 AM											
Item Des		OD (in)		Len (ft)		Top (ftKB)		Btm (ftKB)			
Other String Components											
Item Des		OD (in)		Len (ft)		Top (ftKB)		Btm (ftKB)			
2 7/8" cut off jt		2.441		15.00		15,662.0		15,677.0			
Otis WB Perm Pkr, Seal Assy		4 1/2		4.00		15,677.0		15,681.0			
2 7/8" cut off jt		2.441		7.00		15,596.0		15,603.0			
450-237 Hornet Pkr		4 1/2		4.00		15,603.0		15,607.0			
Other In Hole											
Des		OD (in)		Run Date		Pull Date		Top (ftKB)		Btm (ftKB)	
KO Plug 1		8 1/2		12/16/1987				12,510.0		12,575.0	
KO Plug 2		8 1/2		2/16/1988				14,340.0		14,350.0	
Fish-3 bit cones		8 1/2		2/11/1988				15,522.0		15,523.0	
Bottom Hole Cores											
Date		Core #		Top (ftKB)		Btm (ftKB)		Recov (ft)			
11/25/1987		1		15,225.0		15,257.0		31.0			
11/30/1987		2		15,257.0		15,287.0		5.0			

MD (ftKB)	TV D (ftKB B)	In cl (°)	Vertical schematic (actual)	Logs
3.0			5-1; Tubing Hanger; 3.67; 2.357; 3.0; 2.00	
4.9			5-2; Pkr Travel/tbg compression; 2 7/8; 5.0; 9.00	
14.1			5-3; 2 7/8 N-L 80 eue PUP Jt; 2 7/8; 14.0; 1.84	
15.7			5-4; 2 7/8 eue B x 2 7/8 PH6 Hyd P XO; 2 7/8; 15.8; 0.70	
16.4			1-1; Casing Joints; 16; 15.010; 31.0; 28.50	
59.4			1-2; Guide Shoe; 16; 59.5; 0.50	
60.0			2-1; Casing Joints; 9 5/8; 8.835; 31.0; 1,990.20	
2,021.0			2-2; DV Tool; 9 5/8; 2,021.2; 1.50	
2,021.3			2-3; Casing Joints; 9 5/8; 8.835; 2,022.7; 2,900.30	
2,022.6			2-4; Float Collar; 9 5/8; 4,923.0; 0.80	
4,922.9			2-5; Casing Joints; 9 5/8; 8.835; 4,923.8; 81.70	
4,923.9			2-6; Shoe; 9 5/8; 5,005.5; 1.50	
5,005.6			5-5; Tubing; 2 7/8; 2.441; 16.5; 10,154.41	
5,006.9			3-1; Casing Joints; 5 1/2; 4.778; 31.0; 15,862.70	
10,170.9			5-6; 2 7/8 PH6 Hyd B x 2 7/8 eue P XO; 2 7/8; 10,171.0; 0.80	
10,171.6			5-7; Tubing; 2 7/8; 2.441; 10,171.7; 4,470.97	
12,457.0				
12,509.8				
12,575.1				
12,955.1				
14,339.9			5-8; XN Nipple 2.312 Otis Profile; 2 7/8; 14,642.7; 1.32	
14,642.7			5-9; Tubing; 2 7/8; 2.441; 14,644.0; 33.72	
14,644.0			5-10; 2 7/8 eue B x 2 3/8 eue X Over; 2 7/8; 14,677.8; 0.38	
14,669.9			5-11; 10K Carb AS1-X Pkr; 4 1/2; 14,678.1; 3.56	
14,677.8			5-12; CM to btm; 2 3/8; 14,681.7; 3.85	
14,678.1			5-13; Re-Entry Guide; 3 1/16; 2.000; 14,685.6; 0.37	
14,681.8				
14,685.7				
14,686.0				
15,600.1				
15,662.1				
15,676.8				
15,681.1				
15,792.0			Perforated; 15,792.0-15,822.0; 4/13/1988	
15,821.9				
15,893.7				
15,894.4			3-2; Float Collar; 5 1/2; 15,893.7; 0.80	
15,926.8			3-3; Casing Joints; 5 1/2; 4.778; 15,894.5; 87.00	
15,981.6			3-4; Shoe; 5 1/2; 15,981.5; 1.50	
15,982.9				

Lisha Cordova - Flash Fed 1 SWD Well

From: Lisha Cordova
To: PollyT@whiting.com
Date: 9/13/2012 10:31 AM
Subject: Flash Fed 1 SWD Well
CC: scott.swain@whiting.com
Attachments: Flash Fed Csg Integrity Test.pdf

43 043 30282
3N 15E 18

Thanks Polly! The next MIT due date for the above referenced well has now been changed from 9/16/14 to 3/30/2017.

Lisha Cordova
Environmental Scientist III
Division of Oil, Gas and Mining
1594 W. North Temple, Suite 1210
Salt Lake City, Utah 84116
T: 801-538-5296
C: 801-386-3902
lishacordova@utah.gov

>>> Polly Tobin <PollyT@whiting.com> 9/13/2012 10:16 AM >>>

Good morning Lisha,

You were on my list to call and I got hung up this morning. However, I did hear from Scott, he said that the backup I was referring to was not attached to the sundry I filed. I do apologize. I have attached the graph and test data that should have been attached.

<<Flash Fed Csg Integrity Test.pdf>>

Regards,

Polly Tobin, Eng'r Tech

Whiting Oil and Gas Corporation

1700 Broadway, Suite 2300

Denver, CO 80290

O 303-837-1661 x1142

F 303-390-4923

ypSerial number 160159

Model 10KPSIXP2I

Units PSI

Firmware version D0018

Run index 1

Logging Type Actual

Logging Interval 30

Start time 3/30/2012 10:02

Stop time 3/30/2012 10:34

Time Reading

0

0

0

0

30

60

90

120

150

180

210

240

270

300

330

360

390

420

450

480

510

540

570

600

630

660

690

720

750

780

810

840

870

900

930

960

990

1020

1050

1080

1110

Message store CASING INTERITY TEST

WHITING OIL & GAS

WELL NO: FLASH FEDERAL NO. 1

SUMMIT CO., UTAH

Event

Event Data

Battery OK

Logging Interval, 30

Tare, -4

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SEPT 13 2012

DIV. OF MINING

START TEST

1140	1228
1170	1228
1200	1228
1230	1228
1260	1228
1290	1228
1320	1228
1350	1228
1380	1228
1410	1228
1440	1228
1470	1228
1500	1228
1530	1228
1560	1228
1590	1228
1620	1228
1650	1228
1680	1228
1710	1228
1740	1228
1770	1222
1800	1118
1830	-4
1860	-2
1890	-2

RECEIVED

SEPT 30 2012

DIV. OF OIL, GAS & MINING

END TEST

Data Collection Report: FLASH FEDERAL NO. 1/ CSG INTEGRITY TEST

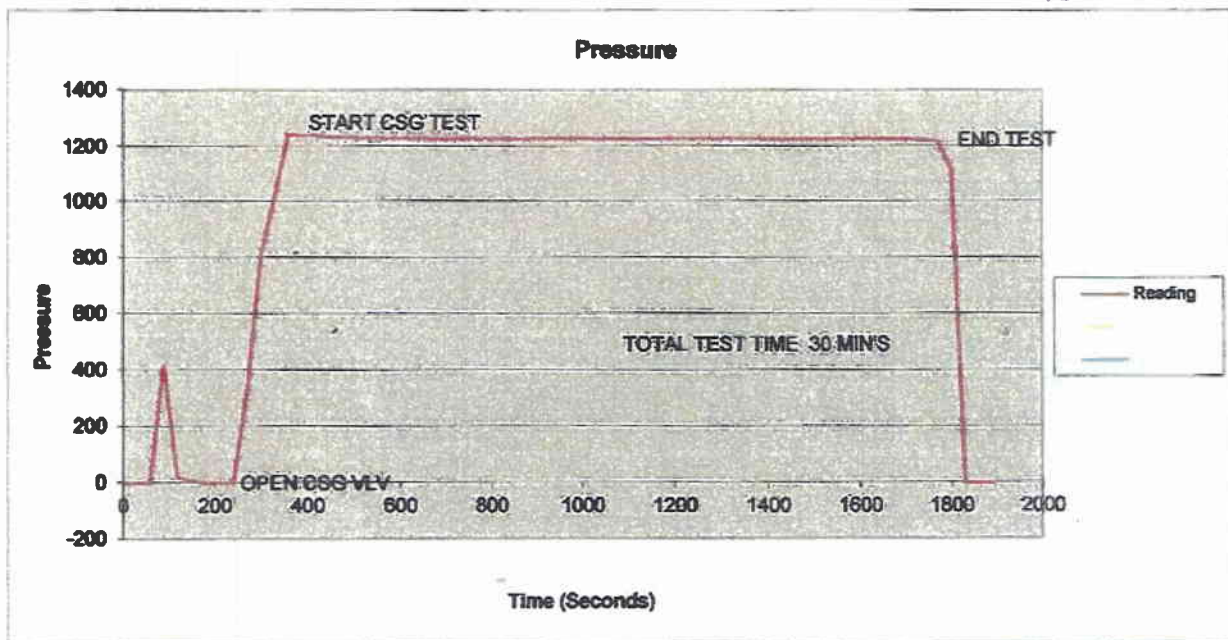
WHITING OIL & GAS REP: SCOTT SWAIN

WIRE TECH.. REP: RICHARD DUCHARME

Gauge Information	
Serial number	160159
Model	10KPSIXP2I
Message store	
Units	PSI

Run Info	
Start time	3/30/12 10:02:34 AM
Stop time	3/30/12 10:34:32 AM
Logging interval	30

Flesh Fed 1 43-043-30282



RECEIVED

SEPT 13 2012

DIV. OF OIL, GAS & MINING

Lisha Cordova - MIT's & Max Allowable Inj Pressures

From: Lisha Cordova
To: scott.swain@whiting.com
Date: 9/13/2012 9:38 AM
Subject: MIT's & Max Allowable Inj Pressures
Attachments: 20120913 Whiting.pdf

Hi Scott,

It was nice talking with you today. As discussed earlier, if you send me a copy of the Elect. Gauge Chart/MIT that was performed on the Flash Fed 1 water disposal well back in March 2012, I can move the next MIT due date for the well from 9/16/2014 to March 2017. You may submit the chart via email, and I will make sure it makes it to the well file.

Also, attached is the information you requested. Call me if you have any questions.

Thanks,
Lisha

Lisha Cordova
Environmental Scientist III
Division of Oil, Gas and Mining
1594 W. North Temple, Suite 1210
Salt Lake City, Utah 84116
T: 801-538-5296
C: 801-386-3902
lishacordova@utah.gov



Please find attached a list of the projects that performed at Bridger Lake.

Bobbie Herbst <Bobbie.Herbst@whiting.com>

Fri, Jan 24, 2014 at 11:06 AM

To: Lisha Cordova <lishacordova@utah.gov>

Cc: Scott Swain <scott.swain@whiting.com>, Jared Huckabee <jared.huckabee@whiting.com>

Hi Lisha,

43 043 30282
Flash Fed 1
3N 15E 18

You and I spoke several weeks ago, and you requested a list of the various projects performed at the Bridger Lake Unit. Scott was good enough to put a list together for me and I have attached it for your files.

If you need additional information at this time, please advise us

Thank you.



Bobbie Herbst

Senior Engineering Technician

Whiting Petroleum Corporation

and its wholly owned subsidiary

Whiting Oil and Gas Corporation

1700 Broadway, Suite 2300

Denver, CO 80290

Direct (303) 357-1414

Fax (303) 357-1413

bobbie.herbst@whiting.com

www.whiting.com



BRIDGER LAKE UNIT Ltr of upgrades.docx

14K

BRIDGER LAKE UNIT

PROJECTS

#1: Removed all equipment and buildings pertaining to the BL gas production plant. Removed all old lines and Compressors that were used for Gas lift designs.

#2: Built and completed new tank battery at the Bridger lake plant area, for oil sales from BL wells.

#3: Installed remediation tank battery and dewatering system at the Bridger lake plant area

#4: Built and completed new S.W.D. transfer tank battery at the BL#5 Location. (This pumps the production water from the BL wells to the injection well located at the BL#10 Location.

#5: Built and completed new tank battery for HYD. Pump set up for the BL#7 well.

#6: Pulled out the 3.5 tbg. And gas lift system, installed new 2-7/8" tbg. With Hyd. pump cavity application for artificial lift.

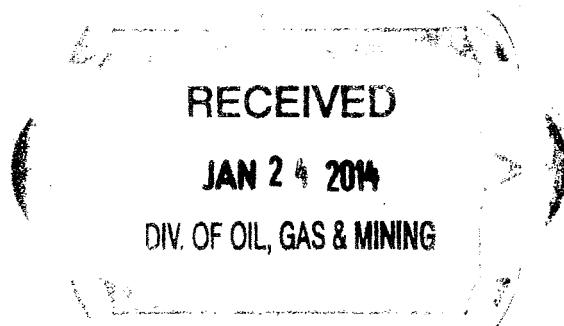
#7: Built and completed new tank battery for Hyd. Pump set up for the BL#13 well.

#8: Pulled out the 3.5 tbg. And gas lift system, installed new 2-7/8" tbg. With Hyd. pump cavity application for artificial lift.

#9: Removed all old line heaters at the following well sites, BL.#3, BL#4, BL#5, BL#6, BL#7, BL#13 Due to the date of the old equipment and no longer in service. These were used for the old gas lift designs.

#10: Removed all old lines on well heads pertaining to the old gas lift systems.

#11: Installed new tank battery at Fresh Fed. #1 (SWD).





SDS Info for the Utah BL Unit

Scott Swain <scott.swain@whiting.com>

Tue, Jan 28, 2014 at 10:18 AM

To: "Lisha Cordova (lishacordova@utah.gov)" <lishacordova@utah.gov>, Kali Rogers <kali.rogers@whiting.com>, Bobbie Herbst <Bobbie.Herbst@whiting.com>, Jared Huckabee <jared.huckabee@whiting.com>, "Kesterson, Roger -FS (rkesterson@fs.fed.us)" <rkesterson@fs.fed.us>

Lisha,
Here is what we talked about.

Thanks



Scott Swain
Operations Supervisor
Whiting Petroleum Corporation
and its wholly owned subsidiary
Whiting Oil and Gas Corporation
1450 East Main
Vernal, UT 84078
Direct (435) 781-1804
Cell (435) 299-0414
Fax (435) 781-1864
scott.swain@whiting.com
www.whiting.com

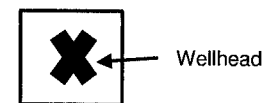
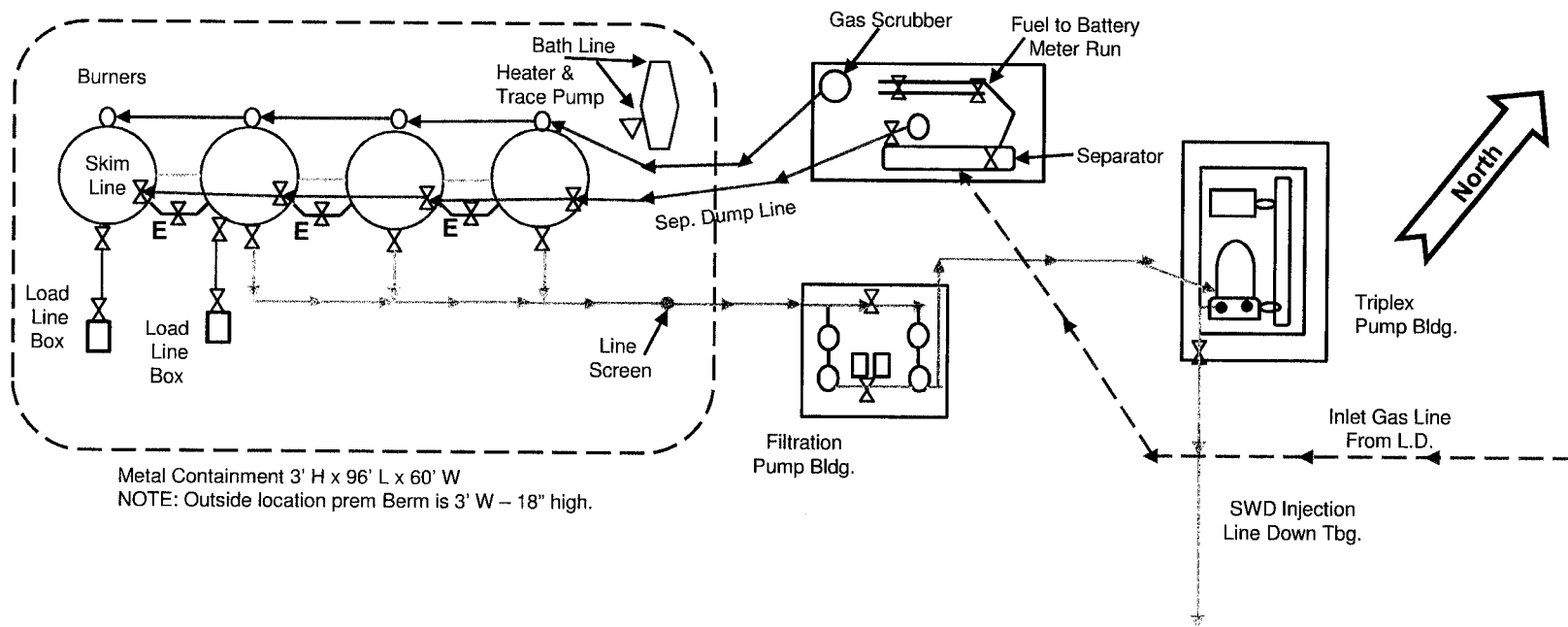
4 attachments

BL ForkA-13 SS Diagram New Battery 122612.pdf
54K

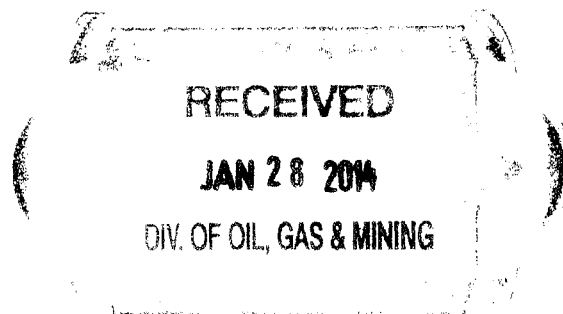
BL A-7 SS Diagram New Battery 122812.pdf
52K

BL Fork 5 SWD SS Diagram New Battery 122712.pdf
41K

FlashFed 1 SWD Battery 123013.pdf
31K



Flash Fed #1 (SWD)



WELL SEARCH

WELL DATA

WELL HISTORY

WELL ACTIVITY

LOOK UP: OPERATOR NAME / ACCOUNT

WHITING OIL & GAS COF N2680 >>>

LOOK UP: FIELD NAME / NUMBER

>>>

SEARCH KEYS (Enter desired keys and press 'Enter' or click on 'Search')

API NUMBER 43043 WELL NAME

OPERATOR ACCOUNT N2680 WELL STATUS/TYPE

FIELD NUMBER ENTITY NUMBER

SECTION / TOWNSHIP / RANGE / MERIDIAN

4304320303: A-7

5/8



SEARCH

CLEAR KEYS

PRINT ALL

EXPORT

GET ALL WELLS

API	WELL NAME	ACCOU	S	WEL	QTR	OT	SECT	TWP	RNG	COUNTY	SURF-LOCATION	OIL-CUM	GAS-CUM	WATER	ELEVATION	DIR	LEASE-NUM
4304320010	A-3	N2680	I	GI	NWNW	25	030N	140E	SUMMIT	0627	FNL 0520 FWL	300230	344634	7899	8952	KB	UTU-013145
4304320143	A-4	N2680	S	OW	NWNW	26	030N	140E	SUMMIT	0990	FNL 1000 FWL	419850	5563125	174725	9132	GR	UTU-013147
4304320186	FORK A-5H	N2680	S	GW	SWSE	23	030N	140E	SUMMIT	1120	FSL 1530 FEL	367886	1572130	4614	9046	GR D	UTU-013147
4304320196	A-6	N2680	S	OW	SWNW	23	030N	140E	SUMMIT	1470	FNL 1045 FWL	1312916	8165863	464186	9101	GR	UTU-013147
4304320303	A-7	N2680	P	OW	SWSE	24	030N	140E	SUMMIT	1120	FSL 1724 FEL	1363307	2190028	446746	8892	KB	UTU-013146
4304330001	D-10	N2680	A	WD	NWSE	14	030N	140E	SUMMIT	1686	FSL 1623 FEL	370884	645606	991447	9030	GR	UTU-013147
4304330146	A-13	N2680	P	OW	NWNE	35	030N	140E	SUMMIT	0050	FNL 1443 FEL	1527614	2407686	702955	9061	GR	UTU-013147
4304330282	FLASH FED 1	N2680	A	WD	SESW	18	030N	150E	SUMMIT	0900	FSL 2600 FWL	0	0	0	8733	GR D	UTU-27918

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No. UTU27918
6. If Indian, Allottee or Tribe Name
7. If Unit or CA/Agreement, Name and/or No.
8. Well Name and No. FLASH FEDERAL SWD 1
9. API Well No. 43-043-30282
10. Field and Pool, or Exploratory BRIDGER LAKE
11. County or Parish, and State SUMMIT COUNTY, UT

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other: INJECTION	
2. Name of Operator WHITING PETROLEUM CORPORATION	
Contact: CARA MEZYDLO Mail: cara.mezydlo@whiting.com	
3a. Address 1700 BROADWAY SUITE 2300 DENVER, CO 80290	3b. Phone No. (include area code) Ph: 303-876-7091 Fx: 720-644-3658
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 18 T3N R15E	

RECEIVED

JUL 11 2014

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Site Facility Diagram/Security Plan
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Whiting Oil and Gas had updated the attached Site Security Diagram.

Accepted by the
Utah Division of
Oil, Gas and Mining
For Record Only

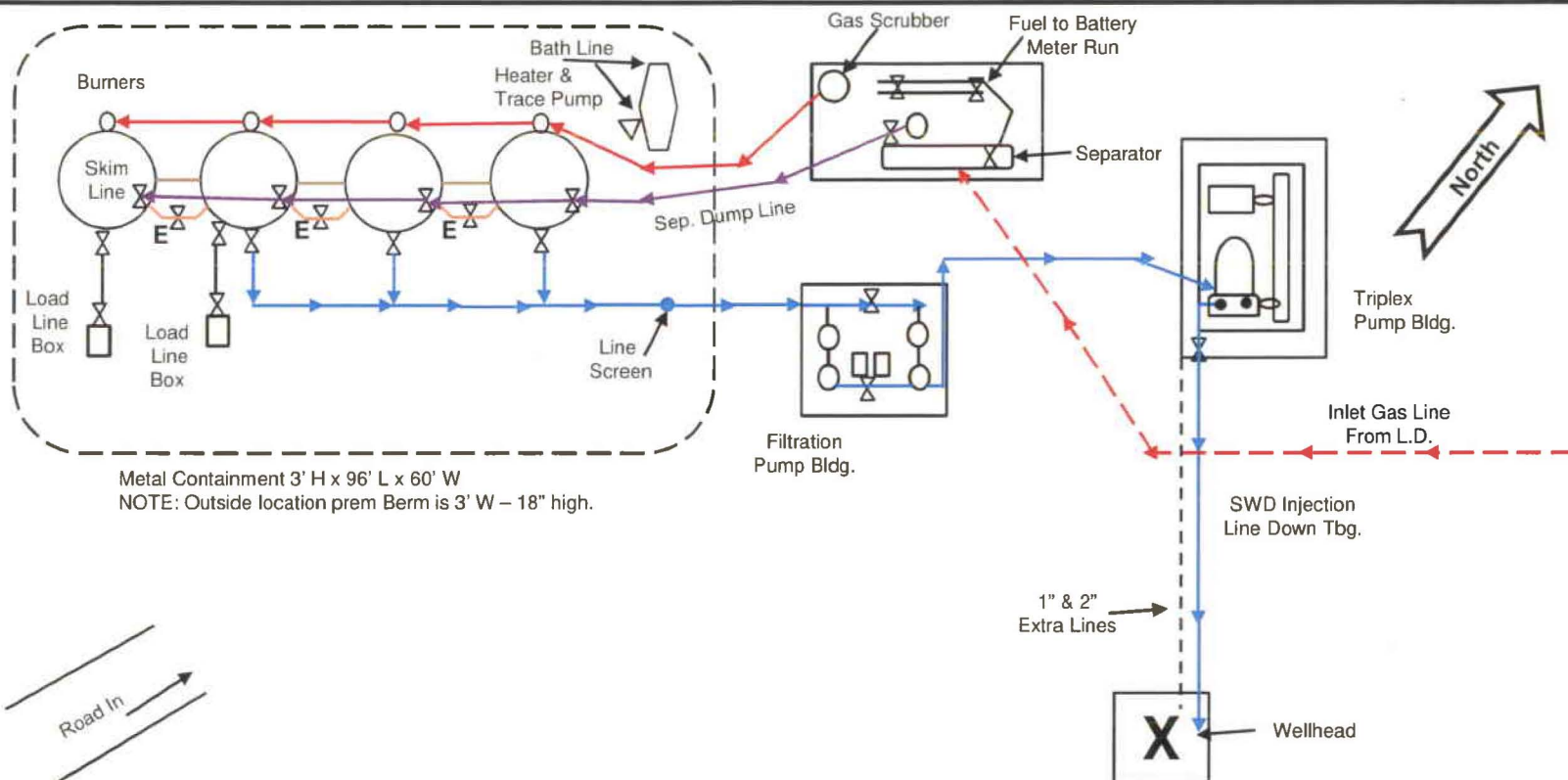
14. I hereby certify that the foregoing is true and correct. Electronic Submission #243255 verified by the BLM Well Information System For WHITING PETROLEUM CORPORATION, sent to the Salt Lake	
Name (Printed/Typed) CARA MEZYDLO	Title ENGINEER TECH
Signature (Electronic Submission)	Date 04/24/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____	Title _____	Date _____
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		
Office _____		

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****



NOTE: Injection Line to Wellhead is 2". There is a 1" gut Line to wellhead & an extra 2" to the wellhead. For gas Heater & trace. (Not hooked up at present.)

LEGEND

- Skim Line —
- Injection Line/
Suction Line —>>>
- Separator Dump Line —>>>
- Equilizer Lines —
- Gas Line —>>>
- Load Lines —

WHITING OIL AND GAS CORPORATION

Bridger Lake Unit U-27918
Flash Federal #1
Lease U-27918, API 43-043-30282
NE/SW, Sec 18, Twp. 3N, Rge. 15E
Summit County, Utah
Revised 1/20/2014



RECEIVED
JUL 11 2014
DIV. OF OIL, GAS & MINING

July 3, 2014

Division of oil, Gas and Mining – Department of Natural Resources
P.O. Box 145801
Salt Lake City, UT 84114-5801

Re: Copies of sundries filed with the BLM

To Whom It May Concern:

Whiting Oil and Gas Corporation respectfully submits copies of sundries recently filed with the Bureau of Land Management for the well(s) listed below.

- Flash Federal SWD 1 (API 4304330282, Lease # UTU27918)

Please contact me at (303) 876-7091 if you should have questions or need additional information.

Best Regards,

Cara Mezydlo,
Engineering Technician III – Central Rockies Asset Group

Whiting Petroleum Corporation
and its wholly owned subsidiary
Whiting Oil and Gas Corporation

1700 Broadway, Suite 2300, Denver, Colorado 80290-2300 Office: 303.837.1661 Fax: 303.861.4023

Division of Oil, Gas and Mining
Operator Change/Name Change Worksheet-for State use only

Effective Date: 11/1/2014

FORMER OPERATOR:	NEW OPERATOR:
WHITING OIL & GAS CORPORATION N2680 1700 BROADWAY SUITE 2300 DENVER CO 80290 303-837-1661	PROVEN PETROLEUM, INC. N4190 390 UNION BLVD SUITE 620 LAKEWOOD CO 80228 303-534-0199
CA Number(s):	Bridger Lake

WELL INFORMATION:

Well Name	Sec	TWN	RNG	API	Entity	Mineral	Surface	Type	Status
D-10	14	030N	140E	4304330001	6285	Federal	Federal	WD	A
FLASH FED 1	18	030N	150E	4304330282	10792	Federal	Federal	WD	A
A-3	25	030N	140E	4304320010	6285	Federal	Federal	GI	I
A-7	24	030N	140E	4304320303	6285	Federal	Federal	OW	P
A-13	35	030N	140E	4304330146	6285	Federal	Federal	OW	P
A-4	26	030N	140E	4304320143	6285	Federal	Federal	OW	S
FORK A-5H	23	030N	140E	4304320186	16970	Federal	Federal	GW	S
A-6	23	030N	140E	4304320196	6285	Federal	Federal	OW	S

OPERATOR CHANGES DOCUMENTATION:

1. Sundry or legal documentation was received from the **FORMER** operator on: 11/24/2014
2. Sundry or legal documentation was received from the **NEW** operator on: 11/24/2014
3. New operator Division of Corporations Business Number: 9175898-0143

REVIEW:

1. Surface Agreement Sundry from **NEW** operator on Fee Surface wells received on: N/A
2. Receipt of Acceptance of Drilling Procedures for APD/New on: N/A
3. Reports current for Production/Disposition & Sundries: 11/26/2014
4. OPS/SI/TA well(s) reviewed for full cost bonding: N/A
5. UIC5 on all disposal/injection/storage well(s) approved on: 12/12/2014
6. Surface Facility(s) included in operator change: NONE
7. Inspections of PA state/fee well sites complete on (only upon operators request): N/A

NEW OPERATOR BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: UTB000650
2. Indian well(s) covered by Bond Number: N/A
3. State/fee well(s) covered by Bond Number(s): N/A

DATA ENTRY:

1. Well(s) update in the **OGIS** on: 12/15/2014
2. Entity Number(s) updated in **OGIS** on: 12/15/2014
3. Unit(s) operator number update in **OGIS** on: 12/15/2014
4. Surface Facilities update in **OGIS** on: N/A
5. State/Fee well(s) attached to bond(s) in **RBDMS** on: N/A
6. Surface Facilities update in **RBDMS** on: N/A

LEASE INTEREST OWNER NOTIFICATION:

1. The **NEW** operator of the Fee (Mineral) wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: N/A

COMMENTS:

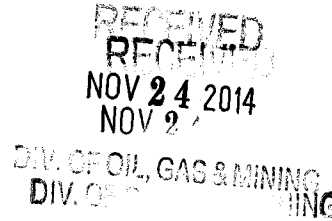


Matt Hartford
303 892 7212
matt.hartford@dgsllaw.com

November 21, 2014

Via FedEx

Rachel Medina
Department of Natural Resources
Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Salt Lake City, UT 84116



Dear Rachel:

This letter is in reference to my letter sent to you dated November 6, 2014. Included in that letter was a package of documents submitted to your office for approval. Those documents designated Kings Peak Energy LLC as the successor operator, which should have named Proven Petroleum, Inc. as successor operator. Enclosed within this letter are new forms designating Proven Petroleum, Inc. as successor operator. Proven Petroleum, Inc.'s bond number is UTB000650. At this time we respectfully request that you disregard the previous designation of successor operator documents and process for approval the following documents:

1. Two (2) originals plus one (1) copy of Sundry Notices and Reports on Wells

In addition, I have also included a prepaid Federal Express envelope to assist you in returning the enclosed.

Thank you for your assistance with this matter. If you have any questions please feel free to contact me at 303-892-7212 or email matt.hartford@dgsllaw.com

Sincerely,

A handwritten signature in black ink, appearing to read "M Hartford".

Matt Hartford
Associate
for
DAVIS GRAHAM & STUBBS LLP

Encl.

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <u>See attached exhibit</u>		5. LEASE DESIGNATION AND SERIAL NUMBER: <u>See attached Exhibit</u>
2. NAME OF OPERATOR: <u>Whiting Oil & Gas Corporation</u>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: <u>See attached Exhibit</u>
3. ADDRESS OF OPERATOR: <u>1700 Broadway</u> CITY <u>Denver</u> STATE <u>CO</u> ZIP <u>80290</u>		7. UNIT or CA AGREEMENT NAME: <u>See attached Exhibit</u>
PHONE NUMBER: <u>(303) 837-1661</u>		8. WELL NAME and NUMBER: <u>See attached Exhibit</u>
4. LOCATION OF WELL FOOTAGES AT SURFACE: <u>See attached Exhibit for all wells and details</u>		9. API NUMBER: <u>See attach</u>
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:		10. FIELD AND POOL, OR WILDCAT: <u>See attached Exhibit</u>
COUNTY:		STATE: <u>UTAH</u>

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input checked="" type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: <u>11/1/2014</u>	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> OTHER: _____
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Effective November 1, 2014, Whiting Oil & Gas Corporation resigned as Operator of the wells listed on the attached Exhibit, and Proven Petroleum, Inc. has been designated as successor Operator.

Proven Petroleum, Inc. 4190
390 Union Boulevard, Suite 620
Lakewood, CO 80228
Phone: (303) 534-0199

Whiting Oil & Gas Corporation N 2680
1700 Broadway, Suite 2300
Denver, CO 80290
Phone: (303) 837-1661

B.L. Stahl
John Telf - President
Brandon Standiford, Secretary
BLM Bond: UTB000650

RECEIVED
NOV 24 2014

DIV. OF OIL, GAS & MINING

NAME (PLEASE PRINT) <u>David M. Seery</u>	TITLE <u>Vice President - Land</u>
SIGNATURE <u>[Signature]</u>	DATE <u>11/21/2014</u>

(This space for State use only)

APPROVED

DEC 15 2014

DIV. OIL GAS & MINING
BY: Rachel Medina

EXHIBIT B
WELLS AND UNITS/WI/NRI

Well Exhibit for DOGM (Utah State)

LEASE/UNIT	Lease #	Case #	API #	Active	Inactive	P&A'D	SWD	FIELD	COUNTY	STATE	RESERVOIR	LOCATION: SEC - TWP - RNG
BRIDGER LAKE FEDERAL UNIT												
B L FORK A-3	UTU013145	UTU630460	4304320010		1			BRIDGER LAKE	SUMMIT	UT	DAKOTA	25-3N-14E
B L FORK A-4	UTU013147	UTU630460	4304320143		1			BRIDGER LAKE	SUMMIT	UT	DAKOTA	26-3N-14E
B L FORK A-5H	UTU013147	UTU630460	4304320186		1			BRIDGER LAKE	SUMMIT	UT	FRONTIER HZ	23-3N-14E
B L FORK A-6	UTU013147	UTU630460	4304320196		1			BRIDGER LAKE	SUMMIT	UT	DAKOTA	23-3N-14E
B L FORK A-7	UTU013146	UTU630460	4304320303	1				BRIDGER LAKE	SUMMIT	UT	DAKOTA	24-3N-14E
B L FORK A-13	UTU013147	UTU630460	4304330146	1				BRIDGER LAKE	SUMMIT	UT	DAKOTA	35-3N-14E
BRIDGER LAKE D-10 SWD	UTU013147	UTU630460	4304330001				1	BRIDGER LAKE	SUMMIT	UT	DAKOTA	14-3N-14E
				2	4	0	1					
FLASH FEDERAL 1 SWD												
FLASH FEDERAL 1 SWD	UTU27918	UTU27918	4304330282				1	BRIDGER LAKE	SUMMIT	UT	Dakota SWD	18-03N-15E
				2	4	0	2					

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

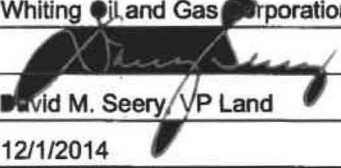
UIC FORM 5

TRANSFER OF AUTHORITY TO INJECT

Well Name and Number Bridger Lake A-3	API Number 4304320010
Location of Well Footage : 327 FNL 520 FWL County : Summit QQ, Section, Township, Range: NWNW 25 3N 14E State : UTAH	Field or Unit Name Bridger Lake Lease Designation and Number UTU0130145

EFFECTIVE DATE OF TRANSFER: 11/1/2014

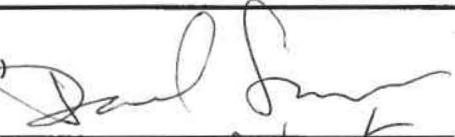
CURRENT OPERATOR

Company: Whiting Oil and Gas Corporation	Name: Whiting Oil and Gas Corporation
Address: 1700 Broadway, Suite 2300	Signature: 
city Denver state CO zip 80290	Title: David M. Seery VP Land
Phone: (303) 837-1661	Date: 12/1/2014
Comments:	

NEW OPERATOR

Company: Proven Petroleum, Inc.	Name: Proven Petroleum, Inc.
Address: 390 Union Boulevard, Suite 620	Signature: 
city Lakewood state CO zip 80228	Title: Corporate Secretary
Phone: (303) 534-0199	Date: 12/3/14
Comments:	

(This space for State use only)

Transfer approved by: 
Title: UIC Geologist

Approval Date: 12/12/14

Comments:

RECEIVED
DEC 10 2014
Div. of Oil, Gas & Mining

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

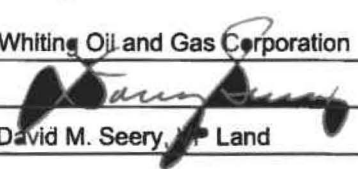
UIC FORM 5

TRANSFER OF AUTHORITY TO INJECT

Well Name and Number Flash Federal SWD 1	API Number 4304330282
Location of Well Footage : 900' FSL & 2600' FWL County : Summit QQ, Section, Township, Range: NESW 18 3N 15E State : UTAH	Field or Unit Name Bridger Lake Lease Designation and Number UTU27918

EFFECTIVE DATE OF TRANSFER: 11/1/2014


CURRENT OPERATOR

Company: Whiting Oil and Gas Corporation	Name: Whiting Oil and Gas Corporation
Address: 1700 Broadway, Suite 2300	Signature: 
city Denver state CO zip 80290	Title: David M. Seery, Jr. Land
Phone: (303) 837-1661	Date: 12/1/2014
Comments:	

NEW OPERATOR

Company: Proven Petroleum, Inc.	Name: Proven Petroleum, Inc
Address: 390 Union Boulevard, Suite 620	Signature: 
city Lakewood state CO zip 80228	Title: Secretary
Phone: (303) 534-0199	Date: 12/3/14
Comments:	

(This space for State use only)

Transfer approved by: 
Title: VIC Geologist

Approval Date: 12/12/14

Comments:

RECEIVED
DEC 10 2014
Div. of Oil, Gas & Mining

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

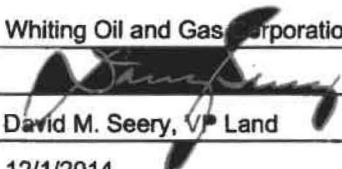
UIC FORM 5

TRANSFER OF AUTHORITY TO INJECT

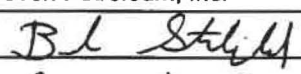
Well Name and Number Bridger Lake D-10	API Number 4304330001
Location of Well Footage : 1623' FEL & 1686' FSL County : Summit QQ, Section, Township, Range: NWSE 14 3N 14E State : UTAH	Field or Unit Name Bridger Lake Lease Designation and Number Utah 013147

EFFECTIVE DATE OF TRANSFER: 11/1/2014

CURRENT OPERATOR

Company: Whiting Oil and Gas Corporation	Name: Whiting Oil and Gas Corporation
Address: 1700 Broadway, Suite 2300	Signature: 
city Denver state CO zip 80290	Title: David M. Seery, VP Land
Phone: (303) 837-1661	Date: 12/1/2014
Comments:	

NEW OPERATOR

Company: Proven Petroleum, Inc.	Name: Proven Petroleum, Inc.
Address: 390 Union Boulevard, Suite 620	Signature: 
city Lakewood state CO zip 80228	Title: Corporate Secretary
Phone: (303) 534-0199	Date: 12/3/14
Comments:	

(This space for State use only)

Transfer approved by: 

Title: Vice Geologist

Approval Date: 12/12/14

Comments:

RECEIVED

DEC 10 2014

Div. of Oil, Gas & Mining